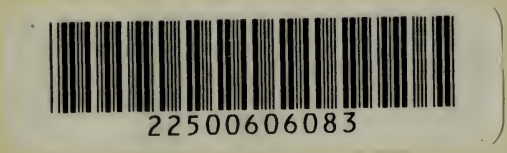
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# Creative Imagination

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# Creative Imagination

## Studies in the Psychology of Literature

By

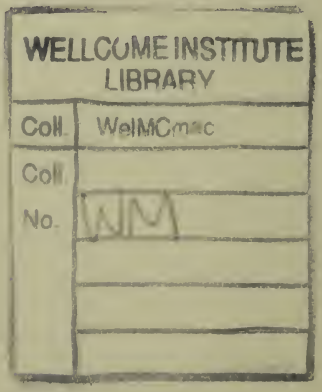
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TO MY STUDENTS
WHO HAVE TAUGHT ME MANY THINGS




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# INTRODUCTION

To obtain glimpses of the landscapes of other minds is one of the rewards of a leisurely transit through the realms of psychology. The experience is both entertaining and disturbing; entertaining, because of the infinite variety of the scenery, from polar ice-fields to tropical jungles; disturbing, because it is difficult holding to favourite dogmas when one sees cacti, magnolia trees, wild plum all flowering in beauty.

The variational factor in psychical experience has always fascinated me, so too has that realm back of the North Wind, the poetic imagination. Both literary appreciation and creation suggest fascinating problems that might be solved in the laboratory. I am aware that to many the suggestion of such work savours of a desire to unweave the rainbow. It does not seem so to me even in face of a most deep-seated passion for poetry. I am aware, too, that to many writers on æsthetics what has been done in the laboratory up to the present seems largely trivial or futile so far as their interests are concerned. Perhaps! Investigators are often, as Emerson would put it, wrong-headed in the direction in which they are rightest. I may, at least, ward off certain criticisms by disclaiming at once any intention of contributing to æsthetic theory or to one of critical evaluation. If the discussions in this book have such implications it is for others to find them. I must, however, register my belief that scientific analysis has much to bestow in the way of clarifying our understanding of the human activities that lead to art-creation and that it

is perfectly well-justified in dwelling on minutiæ and seeking to penetrate their significance. This way has all knowledge, though not necessarily all wisdom, come.

I only regret that I have so little to offer in the way of laboratory investigation, that so small a portion of the field has been surveyed and that but casually; at most, I have gathered up chips from the workshop. Even so, I hope that this book hints at investigations that might be undertaken with profit. Moreover, even an inadequate survey of the range and nature of the variational factor in the response of individuals to art, should, it would seem, be of value to critic, teacher, and philosopher.

I have, in fact, found the discussions of literary critics so often coloured by what to the psychologist was manifestly a prepossession established by the critic's own psychical make-up, that I have come to believe that, as a part of his training, it should be required of each one that he psychologize himself. I am not recommending a Freudian statement of one's complexes—I am far from believing that all criticism is merely a defence reaction—but a cataloguing of one's mental dispositions somewhat in the fashion to be illustrated hereafter, as a precautionary measure in case one is inclined to set up his own sort of experience as the only standard one.

As a preliminary survey and one which contains implicit within it a programme which is to be amplified in the succeeding chapters, let us first review briefly some notable differences in the responses of individuals to poetry.

# Book I

## CHAPTER I

## THE VARIATIONAL FACTOR IN THE ENJOYMENT OF POETRY

It is an old quarrel whether poetic appreciation is more largely dependent upon the power to form images or sensitiveness to verbal and phrasal effects. Is the function of poetry mainly pictorial, that is, representative; or is it sensuous, that is, musical?

In all art a sensuous medium of expression and a representative meaning or content are to be distinguished. If an art is mainly sensorial in value, the sensuous expression is the main aspect. There is delight in pure colour and line, bare auditory quality, sheer rhythm. If the representative aspect is stressed, the imaginative response is of higher importance. There is sensitiveness to the release of illustrative imagery, the portrayal of emotion, the imitation of nature and of human life, the intimation of spiritual truths.

Poetry, on the sensuous side, employs rhythm and the auditory-motor content of external or of inner speech. It is an auditory-motor art allied to music. Its sensuous content may be employed mainly as a carrier of meaning, visual or other imagery, or may have value in itself and for itself alone. There are, for example, forms of lyric poetry in which the auditory content and the rhythm are its chief reason for being. There are poets who aim at creating sheer word-music, who use words not indirectly as symbols of meaning but immediately as musical notes. A high degree of interest in the latter content is shown by delicate susceptibility to assonance and alliteration, to rime and rhythm, with enjoyment of pitch, tone-length, tone-colour. All manner of individual differences are manifest in the response to the verbal side of literature. Our programme must include an exposition of these

differences as well as an account of the immensely fascinating differences in imaginal responses.

The extent to which the reading of novel, essay or poem is accompanied by visualization or other forms of imagery varies with the imaginal predisposition of the reader, the style of the production, and the purpose of the reading. No one would assume to-day as certain critics have done in the past that in meaningful reading every word must needs be translated into an image. We know, for one thing, that the sentence or paragraph, not the word, is the unit of thinking: we know, for another, that the word may carry its own meaning perfectly well. But in the history of literary æsthetics just as in contemporary criticism there have been those who have conceived poetry, at least, to be mainly a pictorial art and have, accordingly, had much to say of word-painting. Poetry is thought to arouse in the imagination a completely *anschauliches Gebilde*, a sensory picture.

One cannot investigate imaginal reactions to any extent without discovering a difference that Ribot [1] describes as the plastic imagination versus the diffluent or emotional imagination. The plastic imagination constructs always in subservience to the dictates of objective reality, the demands of sanity; its ideals involve clarity of conception, limpid and harmonious execution, ordered beauty. The emotional imagination transforms reality so that it may become carrier of all the strange ecstasies and despairs of the inner life; it would make things the symbols of vague infinities; it dissolves what it touches into a formless but creative chaos. For the plastic poet a rainbow is a rainbow, a band of seven translucent colours to be delicately sensed and copied; for the diffluent poet the rainbow is a mystery, a bridge from one Unknown World to another.

Very probably these typical differences in imagination are related to variation in psychical temperament as well as to differences in imaginal type. The visual and tactile-minded are apt to be plastic in imagination, intoxicated with the aspects of sharply individualized things; the auditory are more enamoured of the rhythm of the emotions, of mystic languages, fluid universals. The visual and tactile type is

[1] Ribot, *L'Imagination Créatrice*.

that of objectivity; the auditory and organic of subjectivity. The one is sensitive to spatial measures, linear representation; the other, to the drift and fluctuations of time. Architect, sculptor, painter usually possess the plastic touch; musician and mystic, the diffluent. The poet may give himself either to the faithful portrayal of natural beauty or of substantial truth, or he may yield to the pressure of the world beyond the senses and grope in the twilight of consciousness.

In general, experimental results show that readers with striking dispositional tendencies so far as type of imagery is concerned are apt to prefer literature that makes an appeal to their dominant mode of imaging. A seeming exception comes in the case of those who are highly susceptible to organic and cutaneous effects. Too intense an arousal of such sensations or images may be unpleasant. Moreover, extremely vivid imagery may lead to an unpleasant response if the visualization results in a fantastic or ridiculous picture, such as often happens from a tendency to visualize all phrases, however abstract or figurative. Faint visual imagery resulting from an abortive attempt to visualize a situation also results in unpleasantness. A reader with vivid and persistent imagery may prefer a detailed and unified description to one that suggests rapidly shifting images.

"Here," one writes, "we have visual images called up one after another, crowding each other out in their haste to be seen, like the leaves of a picture-book turned too fast." It was this same reader who wrote of a poem that contained forty-three auditory suggestions in a page and a half, "One almost feels like pressing a deafening finger to the ear to deaden the sounds."

In general, rich imaginal content, a complex of various modes, contributes to enjoyment. Thus the following lines taken from Keats' "To Autumn" suggest manifold and varied images and are exceedingly agreeable to most readers:—

"Who hath not seen thee oft amid thy store?
Sometimes whoever seeks abroad may find
Thee sitting careless on a granary floor,
Thy hair soft-lifted by the winnowing wind;
Or on a half-reap'd furrow sound asleep,
Drows'd with the fume of poppies, while thy hook
Spares the next swath and all its twinéd flowers:

And sometimes like a gleaner thou dost keep
Steady thy laden head across a brook;
Or by a cider-press, with patient look,
Thou watchest the last oozings hours by hours."

Experimental results show very evident individual variation in the kind and intensity of the emotion preferred by different readers as well as differences in preferred sensory modes. Very definite reactions have been recorded as to the degree of tolerance or liking for the depressive emotions (melancholy, sorrow, grief, futility) and the exciting emotions (defiance, revenge, hatred). In every case the situation is complicated by the extent to which the emotion portrayed is personally coloured. Emotional preferences are, moreover, determined somewhat by temporary moods, but, again, with some interesting divergences relatively to the effect of mood. A mood of depression may operate variously in increasing the liking for melancholy poetry or in causing a definite lowering of all values. Stirring emotions may be enjoyed when one is in a "fit" condition but prove too exciting, too stimulating when one is fatigued or relaxed.[1]

One of the most interesting of individual differences is the varying delight in novelty or familiarity of art stimulus. On the one hand, we find a group who are thrilled by the new content, the new form; on the other, a group who view a new development with suspicion, uneasiness, who turn with richer and richer satisfaction to old forms and themes. In part, we mark this difference by calling the first group the romanticists; the others, the classicists. We expect the first to be at times led astray by its catholicity of enthusiasm; the second, by its conservatism. Of course this difference in interest is a very deep-seated one. Even in so simple a situation as that of a psychological experiment in which readers react a number of times to the same passages of poetry this difference in attitude is evident. It is easy to pick out the individuals who return to the experiment with greater and greater pleasure, finding the poetry as they grow familiar with it richer and richer in value; and those who are bored by the task, anxious to turn to other pastures for

[1] See the author's "Emotional Poetry and the Preference Judgment," *Psychol. Rev.*, 22 (1915), pp. 259-278.

enjoyment. Not merely in art-enjoyment but also in daily reactions we find the distinction evident. It is your classicist by temperament who delights in retrospection, in reminiscence, who treasures old associations, old friendships, who twines the tendrils of sentiment around old ruins, old books, old legends. The romanticist, on the contrary, is tiptoe for adventure into the unknown. In search of it he turns restlessly from old melodies to new cadences, from familiar meadows to exotic deserts.

In art, the romanticist tries out all manner of fantastic and, perchance, unprofitable reactions. That he cannot define his goal is part of his pleasure. He welcomes the unique. The classicist perfects form, polishes technique, insists upon the universal element in composition, the common factors in human life and character.

An individual difference of much significance for æsthetic theory is the degree to which subjects of experimental investigations report, or fail to report, a difference in the basis of the affective judgment, that of pleasantness—unpleasantness, and the æsthetic judgment.[1] Even when a difference is felt and expressed, curious variations exist as to the degree that the æsthetic, as æsthetic, is found to be pleasurable. Here the remark is pertinent that there is evidence that merely pleasant poetry wanes more on re-reading than does æsthetically-toned poetry. The latter may even give increased pleasure with greater familiarity with it. It appears, too, that sensorial content is particularly influential in determining a judgment of pleasantness—unpleasantness ; mood-toning, in determining an æsthetic judgment. Even the sensuously unpleasant may contribute to the æsthetic pleasure of Swinburne's line :—

" And swordlike was the sound of the iron wind."

Readers, however, show to a very different degree tolerance for the sensuously unpleasant and, to repeat, for themes that relate to the sad or melancholy. In part, this is due to variation in their thresholds for the unpleasant, in part to

[1] A technical report on an attempt to approach this problem—one of considerable importance in æsthetic theory—from the experimental point of view will be found in the author's " The Imaginal Reaction to Poetry. The Affective and the Æsthetic Judgment," Univ. of Wyo., Dept. of Psychol., *Bulletin* No. 2 (1911), pp. 1-56. No effort will be made to develop this topic further in the present volume.

the degree of their detachment from a practical attitude, in part to their capacity to integrate diverse material. The Ugly in art—the misshapen, the weary, the old—may for some be more expressive than the perfectly symmetrical, the harmonious; for Incompleteness hints at infinitude of meaning.

The group of feelings that are characterized by a definite temporal course of strain-relaxation such as would be involved in following the plot of a drama or novel merit most careful consideration. Here, only one individual difference will be cited. There are individuals who find in the musical interval that remains without resolution or in the unfulfilled rhythm a suggestion of limitless possibilities that opens out wide horizons. In contrast to those that seek beauty in Apollonian calm are those who find it in Dionysian frenzy.

We must, however, reckon with the logician even when occupied with poetry, and there are readers whose main delight in literature centres around its logical perfections, its harmony and unity. Apt phrasing, technical skill and consistency, penetration in the discovery of subtle relationships, these constitute what we may call the virtues of intellectual fitness—virtues absolutely essential to the integrity of a piece of literature in the estimation of those keen thinkers who are trigger-set for detection of irrationalities, set on edge by logical incongruities.

Even here, however, a relative and individual factor must be recognized. Experiences may be condemned as "incongruous" and this judgment mark merely the limitations of the individual reader. Thus synæsthetic phrasing and many metaphorical expressions have, often, an aptness quite beyond the appreciation of those who summarily dismiss them on logical grounds.

That the self enters into all art-experiences in a very subtle if somewhat evasive way is conceded by most writers on æsthetics. A number of writers have been inclined to find in empathy, particularly in its form of inner imitation, the core of the æsthetic response. This can be done only by a generous interpretation of the meaning of the term. Inner imitation in the form of motor mimicry occurs extensively only for a particular type of reader but empathy if understood in a very

broad way as inclusive of all forms of psychic participation is certainly a vital factor in enjoyment.

In literature, individual variations in the relation of self to the story or drama are exceedingly diverse. They range from curious self-visualizations or other forms of explicit self-projection to emotional identifications or detached and almost selfless objectifications. It is, relatively, a simple matter identifying the self-responses in reading literature. We have here, therefore, a profitable method of studying differences in the forms which literary empathy may take and a chance to compare such experiences with empathy in the visual arts where this phenomenon was first noted.

Sterzinger in his valuable experimental study of the moments of æsthetic enjoyment concludes that empathy (Einfühlung) is of relatively less significance than substitution of meaning (Unterschiebung) as it occurs in the metaphorical consciousness.[1] Those among his subjects who were unable to achieve substitution even under instruction were, Sterzinger asserts, noticeably matter-of-fact and prosaic in temperament. By means of his conception of substitution, Sterzinger is able to explain the effect of literary synæsthesia, and the quality of dreamlikeness that is so pronounced a feature in the enjoyment of poetry by certain subjects.

Difficult, indeed, do readers find it to determine and phrase the precise feature in the æsthetic situation that gives certain of them a wonderful sense of infinite life, what they describe as the cosmic emotion. Dreamlikeness, atmosphere, richness and fluidity of suggestion, vagabondage of fancy, they exhaust their vocabulary striving to find the phrase of precision that can convey the mystery and stir of suggestion latent in Poe's lines:—

> " Ah, by no wind those clouds are driven
> That rustle through the unquiet heaven—
> Ah, by no wind are stirred those trees
> That palpitate like the chill seas
> Around the misty Hebrides ! "

There are those for whom poetic enjoyment and the mystic experience are one.

[1] " Die Gründe des Gefallens u. Missgefallens am poetischen Bilder." *Arch. f. ges. Psychol.* (1913), 29, pp. 16-91.

# Book II
# THE IMAGINAL WORLD

## CHAPTER II
## THE INNER WORLD

We are very objective-minded individuals, living in a substantial world of very solid reality, and yet every day for a few minutes or many hours at a time we are rapt away into a different-seeming universe, one of mental impressions, of ideas, of images that symbolize in various fashions the things and qualities of the external world in which we live.[1]

At certain moments our desires or fears give the cue for the appearance of certain actors on the stage of the mind. We may carry on elaborate mental rehearsals of the wedding that is to take place next week or of the journey we hope to realize next vacation. We may build in Ourtown, on the corner of X street, a very modern steam-heated, electric-lighted Castle in Spain. At other times we are imaging scenes of the past, suddenly living again amid other surroundings, visualizing perhaps the fishing-pool with its dappled shadows, or hearing in memory a mother's voice crooning a lullaby.

In our hours of reverie we watch with amused or sombre detachment the seemingly inconsequential images and thoughts that flit through our heads. Some of us have a drop-curtain to that theatre of the mind, a bit of woodland scenery or a seascape painted by fancy or memory that is seen as often as the bright lights of the external world are extinguished, whenever we let go for a moment our practical preoccupations, when we surrender to the noonday siesta or the nightly drowsiness. In moments of relaxation, others of us entertain ourselves with a continued story, a prolonged serial wherein

[1] For a very fine discussion of imagery in relation to poetry, see Chapter XVI, *Principles of Literary Criticism*, by I. A. Richards, in this series.

as hero or heroine we pass through sundry sentimental or practical adventures. We sweep into the ball-room, the cynosure of all eyes; or we thunder from the senate-hall a word of eloquence heard round the world.

About a half century ago the scientist began to tease himself and the rest of us with fascinating questions as to how we think of things. The everyday man does not trouble himself much concerning how he thinks, being abundantly satisfied if he manages to think at all. And where two or three persons discover to their delight that they agree in religion or politics it does not occur to them to compare their mental stuff as well as their conclusions in order to determine whether or not they have reached the same house by following one and the same road. But the psychologist by asking question after question has changed all that. He has revealed to us many fantastic habits of the mind with reference to the form assumed by its memories or imaginations; he has delighted us by giving names to our inner experiences; he has amazed us by his discovery of curious differences between one mind and another. He has, it is true, had some difficulty in convincing a certain type of individual that a neighbour's report of the strange furnishings of his mind may be quite as true as *his* report of the vagaries of his own! But conviction grows by increasing revelation and the polite smile of incredulity that was wont to greet a particularly fantastic report is giving place to a desire to question widely, to understand thoroughly, to compare extensively. We no longer conduct wordy wars as to the proper way of thinking. We concede there's more than one way of realizing the same thought; that it may shape itself in words, or appear concretely in pictured form, or even make itself known as a movement actually made or only thought of. We do not debate now whether a man can think without words. Of course he can so think. Our questions are much more puzzling. Can a man talk to himself (mentally I mean) and fail to *hear* himself talking? Or can he hear himself talking mentally without at the same time actually vocalizing?

To-day, for the most part, there is a generous disposition to receive at its face value the reports of others as to what goes on in the workshop of their minds. We are grown aware

of the fact that there is nothing so whimsical, so unexpected as the mental stuff we accumulate day by day, a most precious sort of rubbish which, however, we turn over pretty carelessly. with little thought as to its value. Often we are unaware of our own originality; we take for granted that the idea that serves us is a patented device and only when first initiated into the mysteries of mental dissection do we discover how strangely divergent are these inner worlds of ours, these microcosms of the psychologist.

To repeat, many ways there are of meaning the same thing. Take, for example, the thought of an autumn day. We may see, in imagination, the tarnished leaves whirling in gusts over the withered grass by the wayside; or hear their crackling, infinitely dreary; or crunch a leaf in our hands or powder it beneath our reluctant feet; or we may be oppressed by the smell of dry dead things. And yet neither vision nor sound nor odour may embody the thought—it may be realized only as a sense of oppression, of a summer gone, of weary lagging feet and hearts.

If we ask for a summary statement of the work that has been done on imagery, up-to-date, we find such a voluminous literature upon the subject that only the specialist can hope to work through it with any degree of thoroughness. We have at hand statistical returns from questionnaires cast appealingly at the feet (or brains!) of amateur psychologists. More than one generation of college student has, at bidding of his instructor, examined his mental visualization of the breakfast table where he sat that morning. He has scrutinized with his mind's eye the texture and pattern of the table-cloth and he had found his mouth watering at retasting a vanished marmalade.

Generations before Francis Galton formulated the first series of questions relative to imagery, the man with a passion for watching the workings of his own mind had discovered his power of picturing the various features of the world outside him and of hearing in memory the sounds of nature. It is to Shakespeare that we owe the fine phrase "in my mind's eye, Horatio," a phrase which had been paraphrased to include the mind's ear also and even, with great accuracy but less regard for the poetry of phrases, "the mind's nose."

If our task were one in systematic psychology we would, at this point, need to consider in some detail the problem of the characteristics of the image, but since our interest is largely one of description we may pass over the topic with the suggestion that the image must not be conceived as a material copy or thing but merely as the content of a thought in which attention is centred on sensory quality of some sort. Such a statement does not take us very far into a scientific analysis of imagery which involves determining what, precisely, are the criteria for distinguishing between images and objects in the outer world, and what are the neurological conditions of the image. It side-tracks also such questions as the presence in imagery of a residual sense-organ activity, or the possibility of all imagery being a delicate patterning of consciousness arising from the focusing of a given sense-organ. It has only descriptive value.

In the earlier work on imagery there was little awareness of the versatility of the mind and the amateur introspectionist is still given to confusing image with picture, so that it is necessary to insist upon the existence of images of sounds, odours, tastes, movements and touches as well as of visions. Consider for a moment the inner ear. The sounds of nature may return to us in the hours of outer silence ; the sound of rushing water, of the wind sighing in the pines or rustling the aspens, of bird-notes falling earthward. And your friends whom perhaps you cannot see in your mind's eye you may hear instead—the whisper of a silken gown, the clacking of a nut-cracker voice, the intonations of musical laughter. But even those who hear with the mind's ear do not all hear alike. There are some who report the power to recall orchestral performances, to hear with the mind's ear a half hundred instruments adding each its component to the harmony of the whole ; others report striking limitations of capacity. They find difficulty in describing the vague schemata, the fantastic shadows of audition that constitute mental sounds for them. How, for instance, describe that bodiless auditory image that means your friend's voice ? It may be a mere ghost of a rhythm ; it may be sheer tenor or bass voice-quality but otherwise characterless ; it may be individualised to the last limit of realism.

Consider, too, olfactory and touch and temperature images. The smell of rain, of wet earth, of the sun on the wind, of sage, may give a tang of reality to reverie. For many, the image of the wind is tactual mainly and given a constant localization. It ruffles the hair or caresses the brow or blows across the left hand. Flowers, too, may be imagined primarily in terms of touch ; the felt-texture of the petals, the felt roughness of the stem. Poe's line

> " And the silken sad uncertain rustling of each purple curtain."

may induce a fingering of the drapery before it is heard or seen.

But if our inner worlds of odour, touch, and sound are hard to describe, even more so is our inner world of movement. We shall have occasion later to emphasize the difficulty of describing those vague twitterings of the vocal organs which often constitute inner speech. Even more difficult is it to catch on the wing the flickering gestures, the amazing sleights-of-hand of our energetic selves. A shadowy nod, a phantom gesture, an abbreviated jump, a rapidly executed side-step, these, too, constitute thought-stuff and furnish the inner world of kinæsthesis—to use the term adopted by the psychologist to refer to experiences of movement.

Many psychologists believe that all so-called images of movement are really suppressed or incipient actual movements. In any case, much overt movement does actually condition the processes of remembering, imagining and reasoning. From our present point of view, indeed, it matters little whether kinæsthetic sensation or image carries our meaning, a statement which holds also with regard to whatever organic material we utilize in thinking. Whether the breathlessness that oppresses us be mental breathlessness merely or actual breathlessness, whether the drowsiness be imaginal or sensational is somewhat a matter of indifference so long as we are interested in a bare description of conscious experience.

Movement which may be felt imaginally may also be seen, in which case we speak of an optical-kinæsthetic image. There are, in fact, individuals who possess kinetoscopic imagery ; they are spectators of a continuous cinema. No vision abides for them. They strive to concentrate on a

particular picture, presto change! they have something else before the mind's eye. For others, it is not a matter of a rapid shift of one image into another, but rather that every image involves movement as part of itself. This statement held true for a young woman who complained that not even the houses she visualized would stay in place. They promenaded down the avenue. Nor did the persons she visualized cultivate a polite repose; one was always seen swaying so violently in a rocking-chair that it rapidly slid off the margin of vision.

For most of us, the inner eye has very curious limitations related in some as yet unknown way to our mental make-up. For some visualists the details fade from the presentation, or the mental eye concentrates on some detail and loses a comprehensive view of the whole. There are certain individuals who are able to see as vividly as you please any particular bit of a situation but never the whole at once; there are others who have the whole in a flash but cannot focus a particular bit. Some thinkers have never discovered the art of coloured mental photography; their mental picture-galleries are hung in etchings, all in black and white; others report nothing but colour in their visualizations, form being a blurred subordinate to richly-hued flashes of light.

Many curious variations in the space characteristics of mental vision are also reported, a topic which demands amplification in a chapter of its own.

There are those who see with the mind's eye scenes that rival actual sights in vividness, richness, and panoramic effects. Of such possibility Wordsworth was thinking when he sang of the inner eye that is the "bliss of solitude." Jack London's "Martin Eden" is full of apparently autobiographic bits that evidence a rare gift of visualization. As the hero calls back to memory scenes of the past he is overwhelmed anew by the scent and colour and the rush of them. "It was to him, with his splendid power of vision, like gazing into a kinetoscope."

Of Jack London himself Mary Austin reports[1] that he possessed the power of visualization to such a degree that he could obtain information for a story directly from pictures present to his mind's eye. She adds that Tissot, on his return

[1] "Automatism in Writing," *Unpartizan Rev.*, 14 (1920).

from the Holy Land where for six years he had made studies for his illustrations of the Bible, stated in an interview that " often while he was studying an historic spot the figure in it would disappear and be replaced with the features of the event supposed to have taken place there."

Of panoramic vision, Mrs Curran, the creator of Patience Worth of Ouija Board fame, has given us a charming account from her own experience while writing in automatic fashion her stories and plays. The characters move about, act out their parts, and hold converse. The picture takes in everything within the circle of vision at the time. If two people are seen talking on the street, Mrs Curran sees not only them, but the buildings, stores, dogs, people and everything on the street just as in a real scene. Such accounts remind us of the recent descriptions of *Eidetiker*, individuals whose images are of almost hallucinatory vividness.

The so-called *Anschauungsbild* or eidetic image is not only extremely vivid but possesses also the richness in detail and the objectivity of a perceptual object. In such an image an object of a former perception is actually seen, not merely imagined. Discovery of the eidetic image as a common possession of childhood has been hailed as one of the great psychological achievements of recent years. Laboratory investigations, which have multiplied since the first accounts of it, have abundantly confirmed its existence although not the far-flung speculations of the Marburg School who would use it as basal to a theory of mental evolution and a doctrine of mental types.

The eidetic image falls in a series between the after-sensation, on the one hand, and the true memory-image on the other. A programme for investigation ranges from minute scrutiny of the behaviour of after-sensations, both positive and negative, to attempts to create experimentally composite or generic images by the fusion of carefully chosen persistent impressions. It is perhaps necessary to state that not all eidetic images are visual and that under other names the eidetic image has been described in earlier reports on psychical experiences. It is necessary, however, to review such descriptions critically in the light of the new point of view, and also to scrutinize hallucinations, pseudo-hallucinations, hynagogic

images and the secondary sensations of ordinary percepts, and of synæsthesias. Investigations of such a nature have been inaugurated and are certain to result in material highly significant for systematic psychology, and for the applied psychology of art, of education, and of medicine.

Although a very large percentage of children between the ages of ten and fifteen years possess eidetic imagery, its retention by the adult appears to be something of an anomaly, often pathologically conditioned. It is, however, not uncommon among poets and artists. Goethe, for example, was eidetic in disposition, and Kroh [1] on the ground of statements found in their diaries, letters and the like concludes that a number of other German writers may also be so classified. Of English poets, Wordsworth and Coleridge are probably to be included among the *Eidetiker*. Mary Austin states that acute visualization is common to all artists, using the term " artist " in its inclusive sense. But a general survey of the types of creative thinkers as well as specific statements from literary workers makes one sceptical of such a generalization. It is, possibly, more nearly true of novelist than of poet, for the latter is at times dominated by verbal rather than visual automatisms.

At this point we may refer briefly to a problem vigorously debated in the past. Does each one of us belong to some type, so to speak, so far as our images are concerned ? Do we live chiefly in a world of visions, or in one of sounds, or one of movements ? And if your neighbour succeed in guessing the form in which you think, is he able then to draw extensive conclusions as to your mental characteristics ? In the earlier investigations the answer to these questions was generally affirmative. The types were named definitely. If a man thought in terms of sight he was called a " visile " ; if in terms of hearing, an " audile " ; if in terms of movement, a " motile." The early treatises abound in entertaining illustrations of the various types. That the painter must be predominatingly visual in imagination seemed a foregone conclusion, just as it seemed inevitable that composers must be auditory in type and live in a world of inwardly-heard melodies. Incidents were recorded of Mozart's marvellous musical

[1] " Eidetiker unter deutschen Dichtern," *Ztschf f. Psychol.*, 85 (1920), pp. 118-162.

memory; and such inward hearing might, it seemed, survive the loss of actual hearing as witness the case of the deaf Beethoven composing his symphonies in a silence that was silence only for the outer ear. Particularly adequate imagery was, it was thought, related to especially sensitive sense-organs. At this point psychoanalysts have nowadays turned the tables and conjecture that musical talent may be a compensatory device for an ear defective in some way; or artistic gifts the outcome of an organically inferior eye.

In any case the older conception of ideational type has to-day given way to recognition of more complicated situations. Most of us are dexterous enough in shuffling our mental cards and are able to pull out at demand, picture, echo, odour or what-not. We belong to the so-called mixed or indifferent type, although most of us have preferred modes of imagery. Usually it seems to be the requirements of the situation and not the ideational-type of the individual which determines what form the image shall take. A song may indeed be imaged in auditory terms; but a landscape visually. Curiously, too, we may employ one kind of sense-material in impressing a given content upon our memory but utilize a different form of imagery in recalling it. We pass easily from one mode of representation to another, and are willing to accommodate the investigator by responding variously at various times. If we care to make the experiment most of us find ourselves able to call up at will a visual image of the colour red; an auditory image of a ringing bell; the salt smell of the ocean; the taste of lemonade; the image of shaking our head or of raising our arm.

Occasionally, however, the psychologists, in course of their investigations, find a subject who reports a complete lack of capacity to ideate in some one or more mode of imagery. There are mentally blind and mentally deaf individuals. And as a matter of control, investigators may find it more profitable to approach certain problems from this negative side of incapacity than from the positive side of undue facility in the management of some one form of image.

## CHAPTER III

## ILLUSTRATIVE IMAGERY

CERTAIN readers have most interesting reports to give us of the mental illustrations with which they embellish their reading. Most of us have experienced a shock of discomfort when our visualization of the beautiful heroine is confronted with the actual illustration found between the book-covers. Again, we have plotted a garden and built a house under the novelist's directions, when suddenly, presto change! We find the staircase that we built facing north should run southward or that we are looking dawnward from a western window. Of course much of our mental illustrating is done in very sketchy form. Occasionally a bit of landscape flashes out with startling clearness, or the hypnotic effect of imaginative literature ends by giving us images of hallucinatory power, but, usually, we are content with fragmentary and occasional pictures.

We are, however, not content with *mere* pictures. We enliven our scenes with sounds; we enrich them with odours; we experience all manner of temperature and tactile and organic effects. But after the detailed descriptions of the former chapter it is not necessary to cite specific instances.

The detail and vividness with which we visualize is, as we have seen, a matter of individual difference. Reading may give us projected pictures of such distinctness that if we but possessed the artist's skill we could hang our homes with the loveliest of scenes. The imagination that presents the world to itself in vivid and concrete images with definite space relationships and definite tactile values we have described as the plastic imagination. Readers of this type of mind demand from the authors and poets they read clear-cut descriptions. A reader belonging to the so-called diffluent type of imagination, one whose imagery is fleeting, vague, with contours washed away, can enjoy a far-fetched analogy, an emotional

figure of speech, an atmosphere story that the plastic-minded reader rejects as absurd.

Often we appeal to memory to illustrate our reading for us. We particularize to the greatest extent possible. We illustrate the text not merely with a general visualization of a river flowing between green banks but with a photographic representation of the Mississippi as it appeared from the car-window one particular day in May. We may even particularize by adopting some feature or person in our immediate environment to do duty in the story. Certain readers have a habit of constructing with great effort, and sometimes with the help of notes and the instructions of a teacher, stereotyped images that serve thereafter for " set stage pieces " for the inner performances.

One of the most interesting and complex forms of stereotyping is the utilization of a number of given backgrounds with which to embellish the scenes of which one reads. I can convey an excellent idea of such " background " embellishment by quoting from a report of one of my subjects.[1] These backgrounds are described as they occurred in the reading of some one hundred fragments of poetry :—

" There are a few definite visual backgrounds. The foreground or centre of the picture I fill in new every time, but the surroundings are the same and include about as much as I could really see if I were looking at such a scene. The colours, sizes, and distances are very realistic. I call them (the backgrounds) visual, but, as a matter of fact, I think there is none that does not have some regular accompaniment of warmth or coolness or wind or rain ; almost all include olfactory images and some call up sound. The strongest images are in the order given, visual, tactual, olfactory, and auditory. I think there is always a feeling of my position and sometimes there are kinæsthetic images.

" Any clear or definite picture either calls up one of these backgrounds, or else makes a new one of its own. A confusing description, or one that it is hard to image, has no background at all, and breaks up quickly.

" (*a*) The most common background is a meadow or meadows filled with flowers, usually white clover. There are a few rail-fences, and a good many little woods or clumps of trees in the rear part of the picture. The country is slightly hilly, and there is a blue sky with some light clouds. Everything is bright with sunshine, and there is a little cool breeze that

[1] From " The Imaginal Reaction to Poetry." University of Wyoming, Dept. of Psychol., *Bulletin* No. 2.

sets all the flowers nodding. Sometimes I hear the trees rustling. This is usually an early morning picture.

" (*b*) This is a variation of (*a*), much the same except that I am facing in a different direction. There are steeper hills and the woods come down almost to where I am standing. A little brook flows out of the wood and down past me, through the meadow. There are many more flowers than in (*a*); it seems to be earlier in the spring and much later in the day.

" (*c*) Every sunrise or dawn image fits into a picture of wild hills and blue mountains under a great rosy sunrise. I am looking straight east, where the sun comes up over the highest mountain. There is a kind of ' mackerel ' sky, and the clouds are all on fire with colour. Everything is cool and hushed, but after I have thought about it for a minute or two, a little breeze comes up, and the colours seem to grow more and more vivid. I cannot make this background last so long as the others.

" (*d*) When I read about sunset, I usually see a sky full of rosy clouds, above a country of low green hills. After a while, the colour contracts until it is all in one place, and there is a great dusky coolness over everything, so sweet that I can taste and smell it—it is a kind of vague image that a real sunset usually calls up

" (*e*) This is a picture of bare brown hills and hollows, very stony, with a great wind rushing over them. It is very sunny, but the picture is mostly one of wind, with tactual, temperature and auditory images and a very pleasant emotional colouring.

" (*f*) This is a queer picture that I get when the description is too abstract for any other background and yet definite in the one image that it calls up. I seem to be looking at something in space, with great depths of air behind it, and this last picture is full of wind.

" (*g*) A picture of yellow wheat-fields with much sunshine and wind.

" (*h*) The interior of a church or cathedral, undoubtedly composed of memory elements which are built up into new combinations, for I have never seen a church exactly like it. I am standing in the aisle not far from the chancel. All visual; beautiful light and shadow effects.

" (*i*) A thunder storm in the mountains.

" (*j*) Another storm picture, very odd. I seem to see the storm up in the clouds somewhere; there are great dark depths of cloud and sudden illuminations of lightning. A great deal of sound (thunder), wind, and rain, and many tactual and thermal images.

" (*k*) An image of hills very far below me, with a great crowd of people singing and shouting. Auditory images, much sunshine, and great depths of air.

" (*l*) An autumn picture much like (*b*), very highly coloured and sunny. Tactual and olfactory images.

" (*m*) A frosty morning. Visual, temperature, tactual, and auditory images.

" (*n*) A mediæval picture, first imagined when I read Mark Twain's ' Joan of Arc,' eight or nine years ago. One end of a hall blazing with sunshine, people in mediæval dress, heralds with trumpets.

" (*o*) In a great evergreen forest; dusk, warmth, the odour and rustle of trees.

" (*p*) A wood of young trees just leafing out in the sunshine, with little brooks flowing through it. Olfactory, tactual, and auditory (children's voices)."

The report given above was written by a reader whose visualizations are obviously plastic in character. The almost infinite diversity of illustrative imagery that may result from the individual differences in imaginal type already described may be shown by a comparison of this report with one on the same fragments by a reader (Gwendolyn McReynolds) whose imagery is diffluent, emotional. These two reports will suffice to point the contrasts in experience during reading :—

" The background or setting for each fragment was almost wholly visual. However, instead of seeing a landscape in a room, or a town such as one might be in contact with any day, my settings were in fantastic, strange worlds. An entire fragment might be suffused with one colour, or there might be a shifting in the colour in the course of reading. There were objects in the settings, but they were not real objects—trees, chairs, or birds. They were often mere patterns of light and shade—suggestive of beautifully proportional and illumined cubist designs—then there were dark, overhanging Glooms, more irregular in form. Everything was extremely high and tall in these settings. Directions were always felt. It was interesting that while I did not project the images to one definite place in front or behind me, when I was in the picture I was never in the darkness nor was I in the glaring brightnesses. In poems where the setting was more or less ordinary, my rooms were grotesque, hung with robes in gorgeous colours, or very light and beautifully windowed all around. There was a sense, too, of the isolation of these rooms. In fact, all my settings are pervaded by a feeling of remoteness. I mention their grotesqueness—they are so only in retrospection; when I am reading they seem entirely natural and usual. I am apt to be on a lower plane than are the images in poems where there is a very richly coloured visual imagery, while in those where the images are more neutral in tone, I am looking at them from above. I am farther away from them in the former than in the latter, too. Objects which come into these settings in the course of the reading of the fragment are seen more often as a visual-kinæsthetic representation of their meaning or mood than as the image of the thing itself. If the mood of the person in the fragment, for instance, is one of despair, I see a Prostrated Curve; when the mood is one of fear, there is a Crouch; when a bird is mentioned, I see a streak of light, going higher. In the first two examples, there is no image of a man or definite person. Such an image, the Prostrated Curve, for instance, may be accompanied by an image of Eyes—apt not to be at all connected with the Curve, but

staring upward, or outward at Life. They are large eyes, which make me shrink from their terrified despairing. Other organs of sense may be magnified and personified in much this way—anything which comes into the fragment may. It is this which would make the images, with their already unusual settings, most probably unintelligible to anyone who might see them projected as a painting.

" For these visual settings and characters, there is an auditory accompaniment, and though I have mentioned some elements in the fragments which come to me visually, the details are much more liable to be auditory, olfactory, etc. I might say here, too, that I feel that all my visual images may contain something of the kinæsthetic, to a greater or less great degree. To go back to the auditory images: they are much more natural and distinct than the visual. I hear rustlings, buzzings, murmurings, moaning, groanings, singing, laughter, just as they are brought into the verse. At the end of a fragment I usually put them all together—the sounds—and have a very meaningful auditory whole. My auditory images come not only from auditory words, ' ring '—' talk '—etc., but from other words. In fact, they come much more freely and richly from other words—such as ' splendour,' ' death,' ' purple,' ' bewildering,' ' ache,' ' pale,' ' quivering,' ' misty.' I find no clear-cut synæsthesia, and these auditory images may be only a result of association, but they are very rich and real. By clear-cut synæsthesia, I mean no sure system of shift in images. My auditory images often, too, form a more eventful, so to speak, environment for my characters. As an example, in Fragment 29 I have a complete auditory image of the myriad noises of Earth and Earth's vibratants—the singing of birds and music of singing voices and instruments, the noises of little creatures, the noises of the Ground itself, thundering of engines, chattering of people—crowds of people—the screeching and sturdy rumble of cities, all these—not a bit comforting, as the poet perhaps intended Earth's message to be, but taunting and mocking the blind seeker of comfort. Here through my images — absolutely spontaneous ones — I have supplied a whole story from the fragment."

## CHAPTER IV

## LOCALIZATION AND PROJECTION OF IMAGES

A STUDY of the spatial characteristics of mental images may be recommended to those philosophers who are interested in the problems of non-Euclidean geometry for there are introspective reports that suggest curious capacities of the mental eye to see in ways not possible for the bodily eye. Some of these possibilities will be mentioned in the present chapter.

Casual observations may be gathered from the literature on imagery that show that we can and often do actually project our images into the external space of real objects. Take, for example, a girl whose habit it was to project the imaged words of her spelling-lesson into the palm of her hand and then, later, at the time of recitation to read off the imaginary letters, thus exciting the curiosity of her mates. Often I have noticed public speakers who were, I was confident from their manner of speaking, reading from a visualized manuscript, and one embryo orator I have known broke in his eloquence at the very point in his manuscript where he had blotted the writing. Musicians, too, perform often from visualized scores; such visualization is, indeed, advised by instructors. Designers may have the power of projecting their designs upon the receiving surface, testing them out before actual construction begins.

In some of these cases we may be dealing with adult *Eidetiker* who, it will be recalled, project their images into external space, but the possibility of training oneself to project images shows that such capacity is not limited to individuals possessing the eidetic disposition.

Dr Lillien J. Martin, Professor-Emeritus of Stanford University, has utilized the projected image in an exhaustive study of imaginal characteristics.[1] Her method required the

[1] "Die Projektionsmethode und die Lokalisation visueller und anderer Vorstellungsbilder." *Zsch. f. Psychol.*, 61 (1912), pp. 321-546. Material used by permission of the author.

subject of the experiment to project his image of an object side by side with the actual object, thus enabling him to make detailed comparison between the two. By use of the Projection Method, Dr Martin has been able to show that there is a general tendency to report visual images as more vivid than they really are. It is only under unusual circumstances and in the case of unusual people that one can see with the mind's eye as vividly as with the bodily eye. As one of the most interesting results of her study, Professor Martin has been able to determine all possible ways of localizing the image. Of these possibilities ten, at least, are of interest to us in our study.

(1) The image of a visualized scene may appear projected into the locality of the actual scene. The observer may take a bird's-eye view of the whole as if from above or he may assume a position *on the edge* or *in the midst* of the scene. Such localization of an imagined scene may be accompanied by a loss of consciousness of actual surroundings. Visualizations that give the trance feeling always have such a localization.

(2) The visualized image may be projected to a distance but the observer feels that he himself is in the midst of the scene.

(3) The visualized image may be projected within the room where the experiment is performed. Sometimes curious apparent changes in the size of the imaged object occur in order that it may accommodate itself to the room; thus landscapes may be seen as pictures on the wall or the observer may seem to gaze upon a landscape through a window. This "looking out of a window" consciousness while visualizing has been frequently reported to me by subjects upon whom I was experimenting. Sometimes small objects are projected on the floor or table of the room and, at times, appear increased in size.

(4) The image may be projected to the wall of the room in which the experiment is carried on, the wall appearing decreased in size and withdrawn. This form of localization is very rare. It is related to a curious distance-illusion that Professor Carr of the University of Chicago has described.[1] Professor Carr found that certain persons report the strange

[1] "Visual Illusion of Depth," *Psychol. Rev.*, 16 (1909), pp. 219-256.

experience of having an object in their environment retreat rapidly, becoming smaller as it retreats. A girl, for instance, while gazing intently at a preacher in the pulpit suddenly finds that he is withdrawing to a great distance, becoming progressively smaller and smaller. The most curious report of this sort I have on record is the following: While leaning against one end of a piano and talking with a man at the keyboard, V would suddenly experience the illusion of the man and front of the piano slipping off into the far distance while the end of the piano upon which she was leaning would maintain its natural size and position. In part, such distance-illusions would seem due to sudden shifts in visual fixation. Some people have voluntary control of the field of vision and are able to see an object as near and big or far off and small. Dr Martin's experiments show that the distance-illusion may also appear in imaginal experiences.

(5) In the fifth form of localization, the image may be projected to its own locality which, however, lies *behind* the observer who feels himself located in the experiment-room.

(6) The visual image may be projected in front of the observer and localized. None the less, the observer has the feeling that the whole is in a space that he cannot identify, which stands in no relation to the space of the experiment-room. The observer reports that the mind's eye and the bodily eye are distinct organs, each with its own space-world, a duplication which, to repeat, raises some interesting questions relative to the psychology of space.

(7) The visual image may appear located in the fore-part of the head of the observer, who feels himself sitting in the experiment-room; or

(8) Located in the middle of his head; or

(9) In the back of the head; or

(10) On the eyes or eyelids.

In the last four forms of localization the eyes may feel drawn or rolled back and the feeling of tension in eyes and head may be disagreeable. There is, probably, a near fixation point; images may be diminutive. Such forms of localization occur frequently when the eyes are closed during visualization.

In general, the spatial characters of the visual image appear to be determined largely by the normal bodily attitude of the

observer and his habits of eye-accommodation and convergence. Certain individuals are inclined to focus the eyes for near vision; others, for far vision. Fluctuations in localization occur in that the focusing of the eyes and the attitude of the body depend somewhat upon the character of the object visualized, upon the direction of the attention and upon certain factors in the experimental conditions such as the size and illumination of the room where the experiment is carried on, etc. In the first form of localization, the eyes are adjusted for far vision; in the second, the images have a tendency to become smaller and the field of vision to become more extended. In the third form of localization there is a definite fixation of the eyes upon some surface or some object in the room with expectant attention.

Leo Stein in his "A B C of Æsthetics" has suggested some interesting experiments concerned with the differences in pictorial effects produced by voluntary shifts in focal planes. If, for instance, you look at a person who is opposite you and place the focal plane in front, the person resembles a picture but if you place the focal plane behind, the person looks like a statue.

> "The essential difference," Stein writes, "between painting and sculpture is precisely this difference in the placing of the focal plane. The front plane is the plane of the frame, on which a picture is actually painted, while the rear plane is the plane of the background against which sculptured reliefs are seen."[1]

It should be obvious that a comprehensive study of the localization possibilities of the image is no mere cataloguing of mental peculiarities without significance. We shall see in the sequel that æsthetic detachment, literary empathy, figurative distortions and the like are tied up with the spatial characteristics of the inner world. To illustrate, the feeling of seeing a visualized landscape as though framed by a window symbolizes the attitude of personal detachment that characterizes æsthetic moments. The poet may himself suggest such visualizations as Keats did in the lines:—

> ". . . magic casements opening on the foam
> Of perilous seas in faery lands forlorn."

[1] P. 168.

Again, the trance or mystic feeling is probably conditioned by optical factors. The roving eye-movements usual at the perceptual level may be replaced by a steady fixation during visualization. How such steady fixation may be induced is one of the mysteries of the poetic response, just as it appears to be a problem for pictorial art as shown by Stein in his illuminating exposition of how " To Make Pictures by Seeing Them." [1]

The fact that the mind's eye in using the musculature of the bodily eye focuses now for near and now for far vision or shifts with great rapidity from one to the other explains in part the freakish performances of the mental Movies. I know one astigmatized introspectionist whose visual images are continually splitting and floating off in curious sections and others whose visual images are always located up and to the right or left side of the field of vision. Some individuals have a double tier of images, an arrangement like that which prevailed in the old plays, where Heaven and Hell were set at different levels on the stage. To the degree that pictorial art reproduces the inner world it will at times find distortion a natural mode of representation.

Variation in size of images has already been illustrated and some of the determining conditions suggested. The dinosaur must perforce shrink in size when he stalks into the study of the palæontologist and the iceberg dwindle in dimensions if it would accommodate itself to the seascape that the painter is visualizing on the canvas. But emotional trends as well as eye-habits affect the magnitude of images. Gigantic visions have panic-stricken many an Ichabod Crane. Cats are always visualized as mammoth creatures by a girl of my acquaintance who suffers from an unreasoning fear of cats, a not uncommon phobia. Maupassant, the writer, for some unknown reason visioned butterflies that were miracles in size as well as colour.

A playing with space-relations gratifies the mastery-instinct and we indulge it not only in toy-making and collection of bric-à-brac but in all sort of ways in art, both pictorial and literary. The artist to-day magnifies that part of the figure which he is most interested in. The athlete may be presented

[1] Loc. cit. Chapter XV.

as mainly arms and legs—head a mere golf-ball ; the fly in the comic picture may be represented as gigantic as it feels. The poet, too, when in the hyperbolic mood does not hesitate to evoke gigantic images. Much of the entertainment of such a story as " Alice's Adventures in Wonderland " lies in the way it makes sport of spatial relations.

The Martin Projection Method was elaborated by its author in an effort to obtain a satisfactory way of studying images ; but many individuals find difficulty in projecting an image side by side with an object. They don't with ease see a visualized ink-bottle to the right of the one they are using. This is because reality-thinking fights so hard with wish-thinking that images are pretty completely banished from the average man's life or else appear so dim and ghost-like that they cannot hold their own beside the real object. For this reason many people if asked to visualize an object at once close their eyes in order that there may be no competition between bodily and mental seeing. Others gaze into the distance with a fixed unseeing stare. Only rarely do we find an individual like Tissot who tells us that the visualized scene obscures the actual one. But if as adults we respond with some difficulty to the request that we project into the exterior world our images of objects it is not the case with the child. Children, who in a high percentage of cases possess eidetic imagery, project their images readily.

In connection with self-projection, which we are to discuss in the next chapter, we shall find other evidence of freedom in handling space characteristics in the inner world. In part, self-visualizations are resorted to in order to increase possibilities in the way of manipulating space relations.

## CHAPTER V

## ON SEEING ONE'S SELF

We are told the story of an unfortunate queen, subject to many court intrigues, for whose discomfiture some ingenious enemy placed a mirror at such a strategic point in the Palace that in her daily promenades Her Majesty quite frequently beheld herself decapitated—an experience that so horrified her (it was in the days when queens actually did lose their heads on sundry occasions) that in her thoughts she always saw herself headless.

Most of us have pleasanter associations with the mirror than this unfortunate queen. It usually contents itself with beheading our vanity rather than our persons; it may even gratify our self-esteem. However this may be, a visualization of the reflection of one's self in the mirror is perhaps the most used of all self-symbols. But the angle of capitulation, so to speak, may vary considerably. Front-face, profile, and back-view are all pleasant possibilities—the latter adopted apparently to assure one's self as to the cut of one's clothes!

Instead of a reflection in the mirror others utilize a photograph as their official representative in their thoughts of themselves and find it an easy way of begging the question so far as time is concerned, since a favourite photograph may do service for a quarter of a century.

There are individuals who in their visual glimpses of themselves appear in abbreviated outline or schematic forms or in fantastic positions. For example, there is the instance of a clever woman who, quite like the unhappy queen, always pictured herself, and with no apparent reason for so doing, as a figure complete only up to the head. And there are cases of men who see themselves in ghostly semblance, as a grey film or a faint sketch of a human being or even as nothing more than a pencilled exclamation point. Some individuals adopt their shadow as the true representative of themselves.

There are thinkers who use their names as a convenient symbol for self. In fact, one frequently cherishes a suspicion that a highly decorated autograph or one with an elaborate paraph actually stands for *myself* in the eyes of the penman.

Nor is it surprising that for those persons who think in motor term, self should seem to be the feeling of strain and muscular sensation that accompanies their most characteristic bodily attitudes. "My thought of myself," says one, "is a mental reproduction of my favourite position of meditation, my chin resting upon my clasped hands. I feel this attitude mentally. I do not see myself; at most, I have a fleeting shadow picture of my clasped hands against which my chin is pressing so insistently." [1]

In the inner world of our thoughts we may clothe ourselves in the most unbecoming garment we ever owned, or, instead, array ourselves in purple and fine linen. Frequently, indeed, it is one's visualized clothes that seem to be one's most real of selves. Mostly we dress the imaginary self rather than the corporeal one; select our millinery to adorn our most youthful and fetching smile; choose our mantle to drape our most amazing ambition. The petite college maid who takes part in all imaginary scenes robed in her favourite azure and silver evening-gown may serve as an example. Sometimes, it is true, the incongruity of her costume amuses her, but none the less she continues to manipulate imaginary pots and pans gowned thus becomingly. It is this same maid who explains that in her thoughts of herself she never appears small.

> "I feel tall," she says—she measures sixty inches—"much taller than Helen, though in the architectural eye of my friends she surpasses me in stature."
>
> "My most intimate idea of myself," reports another college girl, "is the red silk dress of my mother's that from childhood I had admired and which I knew was to be mine some day. Clad in this red silk dress which had been re-fashioned according to an idea of my own, I have taken part in all my mental rehearsals of the future. Always the girl within the dress is of secondary importance, her face in fact is somewhat vague and only distantly related to my actual appearance."

There are fashions and colours well enough adapted to our corporeal persons that our imaginary selves discard

[1] See the author's "The Image of the Self," *The Educ. Bi-monthly*, 4, 1909.

emphatically. At times, indeed, our imaged self clashes abruptly with some suddenly presented objective representation of ourself. Face to face with our image in the mirror, we wonder what scoundrel gave it (the mirror) such an unflattering curvature. We reject indignantly the atrocious photographs of ourselves that our complacent friends consider excellent likenesses, and when the agent punches our excursion ticket "stout and old" we wonder how such a description can possibly identify us at the ticket-office. Most of all we study philosophy—and natural science—to explain the diminished and flattened features that stare back at us from the bowl of a teaspoon.

These symbols of the self as inwardly seen or felt are emotional snapshots representing an obsessive attitude toward an environment hostile or caressing as the case may be. They mirror the sensitiveness of us; our pride and vanity; our secret desires and quaint conceits. Who can doubt the high degree of consciousness of self that leads a pretty girl into seeing herself in every mental picture—and never alone, always surrounded by a crowd of spectators? Or the significance of this report from a society woman who had made an unconventional marriage that she sees herself in her mind's eye as a blanket-draped stoical figure of an Indian squaw, frozen in an attitude of defiance? Or the whimsical mind of the man who took delight in picturing himself as a skeleton sitting demurely on the North Pole, waiting to welcome derisively whatever bold explorer should win his way thither with the proud consciousness of his being first on the spot?

What the social psychologist calls the looking-glass self—the notion of myself that I see reflected from my neighbour's eyes—may create my symbol of the self. Or disliking the form this takes I may compensate for my failure "to put myself over" in life by wielding the tyrant's sceptre in my private fantasies or even by discarding my own bodily garment and appearing boldly as someone else—as did a timid girl who in her thoughts of herself always appeared in the guise of a beloved and masterful brother. The projection of the self into other personalities in this fashion is familiar to us in dreams, art, and religion, but it appears from laboratory

reports that it is sometimes the feature-act of a very simple and matter-of-fact thinker.

Psychoanalysts, in their endeavour to solve the enigmas of personality, might use to great advantage self-visualizations. The projection of self into a child-image or a youth-image may quite well point to regressive tendencies in the individual. And our illustrations have shown that in other respects, too, the self-image may be used in a diagnostic way.

Self-visualizations may also be utilized for very practical and objective purposes, such as a mental trying-on of a new gown. A young teacher reports that her visualization of herself before her class assures her success because it gives her self-confidence. That a self-image may also serve a remote purpose is shown by the case of the young man who sees himself armed with a doctor's case, an index of the profession that he intends to train himself for.

According to Rusk, writing in the *British Journal of Psychology*,[1] children are especially given to self-projection. He cites, for example, a small boy's reaction to the word "Butter," in a test on mental association—"he saw a dairy and 'me going away with butter'—and remarked that it was a funny thing to see—'me going away with butter.'"

An interesting utilization of the Visual Me has been found by Professor Wheeler in studying the experiences of a blind subject.

> He writes: "This 'visual me' is evidently a product of repeated tendencies on the part of the subject to visualize himself as he walks about in order to ascertain, if possible, whether he showed his blindness in any peculiarities in walking."

Visualizations of the self just as other visual images are localized in the various ways suggested in the preceding chapter. The "visual me" may be projected out into the world of external reality and play its part with other life-sized figures or it may assume fairylike proportions as was true in the case of a girl whose visualized self appeared as a tiny figure by her side.

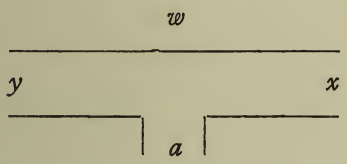
Dr Martin believes that the visualization of the self as part of a scene and in distinction from the felt orientation of the self that is conducting the observation serves to extend

[1] "Experiments on Mental Association in Children," Vol. 3, 1910.

the field of view and that, in fact, the projection of self into visualized scenes has a prime function in the rationalization of the space-relations of the inner mental world.

Let us quote from one of Professor Martin's records :—

"I have a memory image of myself seated in a friend's kitchen at *x*. From *x* I see my friend at *y*, and that whole side of the kitchen, but not the side *w*, unless I turn my head. But there is another me standing in the door at *a*, and this me gets a side view of myself at *x* and the side of the kitchen *w*. I cannot see my friend *y* from *a*, nor that side of the kitchen. The me at *x* has been facing *y*, but when I turn my whole body around in my chair, that me turns to face the door at *a*. The instant *x* turned, the me who was performing the experiment, realized that I had two images of myself looking at each other. This appeared to me to be manifestly absurd, and then *x* could no longer see *a*. There seemed to be a wavering of personality in that there was something at *a*, which saw *x*, but which *x* could not see. Neither could *x* see down the hall through the door where *a* was, the view simply wasn't there—and then the view would change and *x* could see *a* but *a* could not see *x*."[1]




This most interesting report by Dr Martin illustrates not only how by means of a visualization of self the spatial world may be extended but also how such mental gymnastics may result in seeing the self twice in one picture.

I have a number of reports on such a *tour de force*, gathered mainly from accounts of imagery that accompanied the reading of poetry.

A trained psychologist (J) who once served me as subject in an experiment on imagery gave me a surprisingly large number of these double self-projections. It was in his case, I am certain, an expression of an unusually acute feeling for spatial relationships ; his orientation with reference to both his observing and his observed self was exceedingly definite. The distance of the visualized from the observing-self varied from a few feet to several hundred yards. In the latter case the visualized self appeared reduced in proper proportion.

[1] *Loc. cit.*, p. 489.

When the observing-self as well as the self-observed was visualized a double projection of self resulted. Thus in anticipating a trip, J would see himself going to meet himself. Self number one would be largely a motor self with visual glimpses of the feet and self number two a schematic figure approaching self number one from the opposite direction.

J's reports concerning the complications of visual imagery by other sorts is important here. He may feel in his person as reader an appropriate posture, movement, or touch sensation instead of projecting it into his visualization of self.

> Thus: "See self from behind standing on beach, facing west. Has just thrown a shell into water. Visual and motor consciousness of right arm flexed; tension in back felt. No fusion of visual and motor consciousness. Sometimes an actual oscillation. Self seen about one hundred yards off. Size reduced one-fourth."

J may get a double cutaneous report from the observed and the observing self as in the following two reports :—

> "See self lying on the ground on back. Feel the ground against back. As observer, standing. Get cutaneous (touch) sensations from both bottom of feet and back against ground. Cutaneous imagery for both visualized self and observing self."
>
> Again, "motor feel of walking behind visualized self, which appears as a small barefoot boy walking west. Cutaneous images from bare feet."

Mrs Curran, whose vivid imaginal experiences have been commented upon in an earlier chapter, has also described how an author may project himself into his stories.[1] She reports that as she watches the unfolding of the tiny panorama of the story, she herself, small as one of the characters, walks among the people or stands as an onlooker. Sometimes the tiny figure of herself takes part in the play. She smells the flowers in the garden, tastes the fruit of the market-man, or feels the texture of a foreign fabric.

That most terrifying of all apparitions, namely, the ghost or double of one's self, can be explained as the projection of the self-image into the external world. Only occasionally will the image be sufficiently vivid to startle the seer, probably only under conditions of great emotional excitement as when Goethe riding away from tryst with his lady-love met himself

[1] "A Nut for Psychologists," *The Unpartizan Review.*

on the road riding back; or Shelley, rousing the household with his shrieks not long before his death, gave as sufficient explanation for his excitement: "I have followed from my room the embodied shadowy image of myself." [1]

That visualization of the self is a common experience for readers is clear from the cited reports. That writers also have such experiences is shown in the citations from Mrs Curran.[2] Visual self-projection occurs also in art experiences. Observers of painted landscapes may project themselves into the picture, perhaps see themselves walking down a forest-aisle or clambering up a steep mountain-slope. Stein believes, however, that one keeps out of a properly constructed picture; it is a rhythmical whole that *shuts* one out.

Undoubtedly the significant thing about self-reference in art is the attitude toward the situation that is symbolized in the form assumed by the self-projection. Some readers project themselves into the midst of things, others keep on the outskirts as detached and critical observers; while the writers who adopt an impersonal and marginal point of view—symbolized by the position of the self—produce effects very different from those created by one who views his scenes from the centre of action. Amplification of this topic must, however, go over to a later chapter in which an objectivity and subjectivity in art creation will be discussed.

[1] H. B. Smith: "Books and Autograph Letters of Shelley." *Scribner's*, 72 (1922), p. 74.
[2] *Loc. cit.*, p. 156 f.

## CHAPTER VI

## THE SIGNIFICANCE OF IMAGES

It is a fascinating study in the psychology of the scientific mind to note the curious fluctuations in its interests from one decade to another, quite like the learning curve fluctuations of the humblest tyro. At one time much work will be motivated by a particular interest, then another topic comes to the fore; later on, another still. By the time that the first topic is focused again it is necessary to modify the treatment of it by the new discoveries made in other fields. This is what has happened concerning the doctrine of the image. Galton's questionnaire[1] in 1880 initiated active interest in the image. Since Galton's day there have been attempts to explain all things by the course of the image and there have been reactions against it which have held the image to be a more or less useless encumbrance of the process of thought. Imagery has been conceived by some as an extravagance of nature—a sort of mental appendix—fortunately harmless in the main as well as useless. As a final protest we have the Behaviourist's dismissal of the image with a wave of the hand and the casual remark that psychologists have given up the image.

Possibly there may be two questions for debate: whether the image exists, and if it does what it is good for. The first question seems worth discussing only in terms of a more accurate definition of the criteria of the image. The image as a descriptive phenomenon is abundantly attested to by very expert observers. Moreover—again significant of the curious trends in the development of thought—right on the heels of the dismissal of the image by the Behaviourist has come the investigation of the eidetic disposition.

The question of the specific utility of the various forms of

[1] *Inquiries into Human Faculty and its Development.*

imagery is another matter. Scepticism concerning the utility of much imagery developed early.

Galton in his investigations was surprised to find that his scientific friends reported visual imagery that was much more meagre in quantity and much less vivid than that apparently possessed by women and children. He concluded that abstract thinkers employ fewer images than do the more concrete-minded and that as one grows older he loses his imaginal capacity. Galton was dealing chiefly with the visual image, and he was not at all concerned with inner speech. With these limitations in mind we note that there is confirmation of Galton's conjecture; there would seem to be a tendency for thing-imagery to become a less frequent occurrence and much more washed out and schematic in nature as we become more and more expert in dealing with meanings. A fragmentary flicker of an image, if it carry our meaning, is sufficient. A fully developed and detailed image may indeed retard the progress of our thought by distracting attention from the one point of relevance or by swamping us in a multiplicity of details.

Indeed, the advocates of imageless thought claim to carry on their thinking without a scrap of an image. Their opponents insist, however, that they fall back upon sensory support in terms of perceptual stimulation, muscular or visceral tensions, and hence are confusing the issue. But this controversy has proved immensely stimulating since it has opened up a great vein of psychic stuff that had been overlooked while psychologists were busy mining the static image. It encouraged the snapshotting of evanescent attitudes largely kinæsthetic and organic in character; the discovery of non-conscious sets as determinative of psychic patterns; and the recognition of fugitive, scarcely describable, all but bodiless nuances of thought. The image was reconceived, not as a static hard existence, but a fluid, fleeting thing, moulded by every exigency of the momentary task.

Personally, I believe that a most delicate parallelism exists between mind-stuff and psychic functioning. Our present-day methods of observation are too crude to permit us to carry our parallelism far, but the reports of competent introspectionists encourage the belief that when experimental

ingenuity has solved the problem of objective control we shall make great discoveries as to the practical significance of even slight imaginal differences. Emphasis on the sensory modes of imagery such as visual, auditory, olfactory and the like may yield to interest in other aspects, for example, the precision or vagueness of one's images; whether they appear in isolation or bring with them a rich background; their spatial and temporal characteristics; their memorial or imaginative function; the degree to which they are under control. All such phases of the subject deserve careful consideration as well as the significance of the reduction of concrete content until the image becomes a bare schema. Even irrelevant imagery which may occur not only in the form of superfluous additions but even in that of absurd substitutions may turn out in the sequel to be immensely significant. The value of substitution imagery where we mean one thing and think another has been emphasized in a few studies. In figures of speech we resort intentionally to substitutions and to all manner of irrelevancies, a topic which must be amplified in a chapter of its own.

Analyses by expert introspectionists furnish us clues for experimental programmes. The delightful report by the late E. B. Titchener on his own imaginal processes deserves careful perusal.[1]

Among many important observations I select the following which concerns the use of visual schemes. To quote :—

> "I rely," he writes, "in my thinking, upon visual imagery in the sense that I like to get a problem into some sort of visual schema, from which I can think my way out and to which I can return. As I read an article, or the chapter of a book, I instinctively arrange the facts or arguments in some visual pattern, and I am as likely to think in terms of this pattern as I am to think in words. I understand, and to that extent I enjoy, an author whom I can thus visualize."

Further on in his discussion he remarks that there is a serious temptation to allow such visual schemata to become rigid, "I have constantly to fight against the tendency to premature systematization." One can scarcely avoid making

[1] E. B. Titchener, *Experimental Psychology of the Thought Processes*, p. 6 f. Copyright 1909 by The MacMillan Co. Quotations reprinted by permission.

a connection here between this psychologist's type of mind and the kind of psychology he elaborated in so great detail. Surely his imaginal predispositions coloured his system.

Says Wallas in his stimulating attempt to apply psychology in his *The Great Society* :—

> " Many men who now do hard intellectual work with some success have, like the late Duke of Devonshire, never acquired the power of following a verbal argument at all." And the author adds in a footnote, " In any case, men of the ' audible ' type of mind have a natural advantage, apart from training, over the ' visualizers ' (of whom the Duke was probably one) in oral argument."[1]

What investigator has not contrasted the slow, almost measured report of a concrete visualizer with the rapid fluent description of a word-thinker ? What teacher has not seen the latter type shine in oral recitation to the disadvantage of his more deliberate classmate, but later outclassed in some form of constructive work ?

In my own experience I have found imaginal trends significant in countless ways. To quote from a former description [2] :—

> " I may cite a talented girl, preoccupied to an extraordinary degree with the sound qualities of the external world and the sound-images of the inner. This preoccupation is evident in composition in her choice of musical words, her sensitiveness to rhythmic and melodic effects, and her modulations of voice in reading her very charming sketches. With this auditory preoccupation—a preoccupation so intense that she winces at harshness of voice-quality or hardness of phrasing—there goes a keen organic sensitiveness but only dim and fugitive visual images. Her stories are charming in style but vague in plot ; her characters, who speak to her in varied voices, rarely cross the threshold of the visible. Her productions possess emotional but not dramatic nuance ; and she finds it impossible to write a photoplay. She should excel in the personal essay and should be encouraged to try her hand at writing poetry. In contrast is a second student whose stories lack all charm of style but who shows amazing facility when asked to outline scenarios for moving-pictures, because, as she informs me, it is just in true photoplay fashion that her visualized characters perform for her on the stage of her mind."

Dr Lillien Martin [3] has stressed the revelation of personality

[1] P. 243.

[2] A Programme for a Psychology of Literature, *J. of App. Psychol.*, 2 (1918), pp. 366-377. By permission of the Editor.

[3] Personality as Revealed by the Content of Images, *Science*, 45 (1917), pp. 393-99.

by the content of images in general. She concludes from her experimental studies that visual images reveal the mental and physical peculiarities and preferences of an individual and she suggests that a cataloguing of an individual's visual images constitute part of an investigation upon which a diagnosis of personality be based. Self-projective images would appear to be especially self-revealing.

The psychoanalysts also study in great detail imaginal phantasies. From their point of view, indeed, images arise in an endeavour to compensate for the inadequacies of life, or to gratify a desire, as when the hungry baby visualizes his mother, or the lover his sweetheart.

> " As a child," writes Henry Cowell, a young musical composer, " I was compelled to make my mind into a musical instrument because, between the ages of eight and fourteen years I had no other, yet desired strongly to hear music frequently. I could not attend enough concerts to satisfy the craving for music, so I formed the habit, when I did attend them, of deliberately rehearsing the compositions I heard and liked, in order that I might play them over mentally whenever I chose."

Cowell continues the account from which I have just quoted by describing the self-training whereby he learned to control at will the glorious sounds that leaped unexpectedly into his mind until, he reports :—

> " I am able now to produce a flow of musical sounds at will and to control just what they shall be. I am, therefore, able to work at any time, as the musical flow would continue indefinitely if I did not shut it off when I have not the time to work." And again, " because of devoting so much attention to finding the finest form beforehand, by trying the initial idea over mentally in every conceivable way, I rarely change a note as a composition is written."[1]

The utility of such imagery in a professional way can scarcely be doubted and the report is validated by the achievements of the composer.

The approach to imagery from the point of view of temperamental differences is a new departure but I believe great discoveries are to be made in this field. Varying urgency toward expression results in various will-temperaments ranging from that of the fluidic explosive individual to that of the

[1] " The Process of Musical Creation," *Am. J. of Psychol.*, 37 (1926), pp. 233-236.

deliberate individual who gets into action with difficulty. It is the latter who gives most evidence of possessing detailed and vivid visual imagery; for the former fragmentary visualization suffices, with much verbal and motor material.[1]

I have ventured elsewhere[2] the suggestion that visual images are most apt to develop when there is a retardation of discharge tendencies, which might occur in the case of individuals possessed of an undue amount of nervous inertia or load or even under voluntary inhibition of a motor discharge. We have evidence that visual imagination accompanies fatigue and drowsiness, and that dreams are apt to be strongly visual. With a shift from a practical attitude, with its motor readiness, to an æsthetic one, with motor relaxation, one would expect to find visualization enhanced.

The tentative hypothesis sketched above developed from a detailed study of the images of individuals who gave me very differently patterned will-profiles. When I formulated the hypothesis I was not aware that W. Jaensch handles the eidetic image as one among other psychic and somatic stigmata and has distinguished between the Tetanoid or "T-Type" and the Basedowoid or "B-Type."

It is the "B" type of eidetic image, a flexible and variable sort, which is said to be found among the artistically inclined. This image occurs spontaneously and appears to be a pleasant experience. The "T" type of image, on the contrary, masters its possessor, it perseveres in spite of a desire to banish it, and, on the whole, is unpleasant. The point of contact between my conjectures and those of the Marburg School is that both recognize certain features of visualization as symptomatic of psychophysical trends; both describe a rigid image in contrast to a flexible one; both find the latter characterizing the more imaginative individual. The conjectural physiological explanations in the two cases are different. Mine is quite frankly obscure; the Marburg hypothesis is backed by some evidence in the field of internal medicine.

The real interest in this connection is the surmise that imaginal dispositions may be exploited from the standpoint of the psychophysical organism. My own interest in this aspect

[1] See the author's *The Will-Temperament and its Testing*, Chap. 18.
[2] *Loc. cit.*, p. 293 f.

of imagery originated in experiments on muscle-reading. For example, in locating a hidden object by lightly touching the wrist of a subject, I have learned to anticipate the subsequent report of the subject as to how he thought of the object. Strikingly different is the muscular tension of the visualist from that of the reagent who thinks in sub-vocal terms. The first is a more accurate but slower guide ; the second, swifter but more erratic. The whole matter of imagery may in the future be found to tie up with a most delicate conditioning of responses through functioning of the sense organs.

# Book III
# THE WORLD OF WORDS

## CHAPTER VII
## THE INNER SPEECH

History bears eloquent testimony to the power of the spoken word, now thundered at Cataline in the Roman Senate, now hurled by a Savonarola at a perverse generation. But the still small voice celebrates its victories also, as witness the quaint demoniac voice that Socrates was wont to quote; or the heavenly voices that drove the miraculous Maid on to triumph.

With such classic references to the inner voice we are all familiar, but it has been left to the modern psychologist to determine the various forms that the inner voice may assume and to show specifically how it functions in everyday thought and in the making of literature.

To appreciate the points the psychologist makes one should observe the internal speech at first hand. You may do this by listening to yourself think, hearing perhaps your own voice ring in your inner ear. Or you may make your observations while silently reading this very sentence. Does each word echo distinctly in inner hearing? Or, instead, do you hear a confused mumble? Are you, perhaps, aware of nothing but vague vocal twitterings?

Don't conclude at first blush that your answer to all such questions is "No! No!"; that whatever may be the case for others you, at least, need no inner speech since, in reading, you take in the meaning of the text through the eye alone without saying or hearing the words; that your thinking is wordless thinking, without the ghost of imagined sound. The truth is the inner speech is so automatic a process, carried on in so mechanical a fashion, that it requires considerable effort

to concentrate attention upon it. But the sceptic may be converted by a visit to the laboratory where he may watch a record made on a smoked drum by a needle that responds to a rubber diaphragm, which, in turn, vibrates with his vocal movements, during silent reading or silent meditation. Sometimes, of course, such movements approach the vanishing point and the inner sounds, muffled perhaps and indistinct, constitute all of inner speech. Sometimes the silent speech is not so silent, as witness your neighbour at the photoplay whose lips move visibly as he reads the leader on the screen. I recall, too, the case of a friend of mine who found his vocal movements in silent reading very annoying since, because of them, he was unable to manipulate the double process of reading the morning newspaper while eating his breakfast. To help yourself determine how closely you approach a purely auditory image of a word without an actual twittering of the vocal organs, try the classic test of attempting to hear yourself think the word " bubble " while holding the lips rigidly apart by the insertion of a couple of fingers between the teeth.

Let us observe for a few minutes at close range the inner speech as it functions in three specific situations ; first, in silent meditation or reflection ; secondly, during silent reading ; and thirdly, in literary composition.

To reflect, to meditate, to think, is, to a great degree, to talk to oneself, but in what varying accents ? Does your inner voice, for example, assume the characteristic tone-quality of your speaking voice or does it adopt the very different intonations of someone else's voice or is it wholly without colour ? How often for you does internal speech become internal song ? Is your voice a projected voice heard from a distance ? If so, does it sound from your right side or your left ? Abnormal cases furnish curious illustrations of the projection of the voice into various parts of the subject's own body, as for example, his right foot, or its seeming origin in some external object in the immediate neighbourhood. Specifically, in whose voice does conscience speak ? Your own ? Perhaps, instead, conscience adopts the inflections of a censorious neighbour or of a querulous grandfather. Not always, however, is the inner voice one of conscience ; it may be the voice of the mocker or that of a very literal-minded

critic. Or your garrulous self may indulge in long internal soliloquies which easily pass over into actual sound when circumstances permit and indicate that a soliloquy is not a mere dramatic convention, but, on occasions, a very natural form of behaviour.

As common as the soliloquy is, perhaps, the internal dialogue, for often our thinking dramatizes itself and the inner voice speaks in more than one character-rôle. Various relations may exist between the two different characters, depending upon the form of the inner speech. For both characters the inner speech may be motor, but more strongly so for the first person of the dialogue, with whom the thinker identifies himself, than for the second. Or an auditory form of the inner speech may interplay with the motor, in which case the thinker identifies himself with the latter and treats the acoustic process as an intruder. Again, the inner speech may be wholly auditory, with the possibility of intrusion of many voices with one or none of which the thinker identifies himself.

In the writer's own case the inner speech during thought proceeds usually in dialogue fashion, in which one voice is that of Me, the thinker proper, a serious-minded, workaday individual; the second voice is that of the critic. This second voice is more highly pitched than the first and much more ironical and facetious. Its apparent function is to interrupt the first speaker, to question her conclusions, to interject mocking comments. Sometimes when the first voice is engineering composition, the second manages to slip in a parenthetical remark in spite of the rhetorical conscience of the first Me (who is absurdly finicky !).

Often these two voices indulge in a prolonged conversation just before sleep when the thinker would like to command an inner as well as an outer silence. And then as drowsiness becomes more and more pronounced, the first voice drops lower and lower, becomes the merest shadow of vocalization, until, suddenly, the almost-sleeper is aroused by the sharp voice of her second Me saying to her first: " You will have to speak louder if you expect me to hear ! "—a comment quite startling, for can it be possible that the second Me didn't know what the first Me intended to say ?

Investigators of the reading consciousness report that inner

speech during silent reading is practically universal, except in a few rare cases of persons who have completely achieved visual reading; who possess, that is, ability to take in the meaning of a printed page by the bare eye, as it were, with no need of suppressed vocalization of the words read. Most of us, in reading, use the inner speech extensively although heightening our speed by clipping our words and telescoping our sentences. To such an extent may we carry this process of speeding that when we try to read aloud we disgrace ourselves by the jumble of sounds we produce; in reading foreign languages we adopt the pronunciation of our native tongue; and, in general, we sacrifice enunciation and distinctness to rapidity; words to meaning. Even so, investigators point out much useless expenditure of energy in reading. After all, reading by people in general is a very recently acquired social habit, only a few generations old at best, and it is no wonder that it has not yet been clipped to the line of greatest efficiency.

The range of individual difference in reading-rate is truly amazing. An unusually fast reader may have the advantage over a slow reader of some thousands of words even within the hour and, within a lifetime, of several libraries. There are many factors influencing the speed of reading but, as we have already suggested, the quality of the inner speech is of first importance and the amount of visual reading done. One may develop by deliberate effort one's capacity for visual reading and such development is strongly encouraged by educators since, other things being equal, increased speed of reading makes for greater practical efficiency.

Obviously, changes in style are developing as written speech shifts its focus of appeal from the ear to the eye. Short loose sentences and paragraphs take the place of long periodic ones. Melody of language and oratorical periods yield to colloquialisms and clipped phrases. The personal essay with its leisurely charm, its dependence upon personal coloration of style, bids fair to pass into the realm of traditional literature. We may in time realize the Futurists' demands for a literature that is the "apotheosis of the front page of a Sunday newspaper," whose content we can absorb at breakfast or on the Elevated with no consciousness of the form in which it is presented.

Since, as I have suggested, general reading is a very recent achievement historically, we may well speculate in some such fashion as above concerning the changes style may undergo as it becomes better and better adapted to the complex requirements of the modern man and the demand for scientific management of the sense organs. It is possible that the phonetic, or auditory, element may even become wholly obsolete in ordinary prose; stylistic considerations so-called may be completely absorbed by advertising excellencies; but side by side with ordinary prose there may develop a highly specialized art, an auditory art of words, more dependent than even traditional poetry upon the nuances of sound and the modulations of the inner voice. In another chapter we shall have occasion to refer, for example, to the attempt to make poetry a species of music.

Laboratory reports from psychologically trained readers indicate that there are actually four main varieties of the inner speech utilized in the inner reading of to-day, and any number of mixed forms. Summaries of reports obtained from four typical readers are given here, taken from my study on "The Imaginal Reaction to Poetry."[1] They suggest a diversity in experience that raises many fascinating questions.

Let us take, first, the case of S, for whom the auditory aspect of the inner speech is relatively freed from the motor aspect. If attention be concentrated upon it, the auditory aspect of poetry usurps the place of all other imagery. S lays great emphasis upon rime and sometimes accents the riming words in an uncomfortable fashion. In general, however, his reactions are of an imaginative auditory type since he hears each fragment recited in an appropriate voice with very little, or, frequently, with no vocal-motor accompaniment. Sometimes the voice heard is his own; sometimes it is one suggested by the phrasing or proceeding from some visualized character introduced by him to do the reading. Of one hundred and ten fragments of poetry read by him, fifty were heard read in his own voice which was variously modulated; forty-six were definitely stated to be in voices other than his own. Fourteen times the voice was said to be a feminine voice: fourteen times described as a masculine voice not his own. Once there was a distinct shift from a woman's to a man's voice; once a shift from a child's voice to a man's. There were only two cases of purely visual reading and only eight cases where there was no voice or a voice not attended to.

Such a summary of results gives, however, little idea of the

[1] University of Wyoming, Dept. of Psychol., *Bulletin* No. 2, 1911.

infinite variation in auditory quality that S introduces into his silent reading. Thus he may modify his own voice so as to make it more melodious. He describes the voices as sweet or plaintive or cruel; nasal or sonorous; matter-of-fact or measured and dead. Sometimes the effects produced are grotesque as in a fragment from Swinburne in which he hears a child's lisp until he comes to the phrase "Terrible, full of thunders," at which the voice becomes that of an angry man. One fragment which was read in a dead tone was accompanied by a "piercing wail which rose and fell," and in another fragment, read by a woman, there is a cry at the end of each line. Often, for S, the visual imagery aroused by a fragment is that of the speaker of the lines heard recited.

While listening to poetry read aloud, S reported much less auditory inner speech than when reading silently. Often, however, he reported a peculiar echoing of the reader's voice, word by word, an echo which he described as similar to hearing the same note struck at once on two different strings. Such an echoing occurred when S had difficulty in catching the meaning or where there was no translation of the words into concrete imagery. In two or three cases, this echoing became overpowered toward the close of the reading by concrete auditory imagery aroused by the words of the passage. Thus, in one case, the imaged sound of the roar of the ocean overpowered the echo. In several cases, throughout the reading, even the voice of the reader was so overpowered and an immediate translation of the fragment into concrete auditory imagery occurred.

Professor Dallenbach of Cornell University has reported a case which bears comparison with that of S. While listening to conversations and lectures, as well as when reading, the young man in question was "under a constant surge of auditory images, which were as vivid as hallucinations," and could only be described as a din. "The perpetual sounds of words in my head," he writes, "produced headaches, which became more and more severe and frequent as the number of lectures and the length of the class-room assignments increased." [1]

In the second variety of inner speech to be described the inner speech is again strikingly auditory. For this reader (D), however, the voice heard is usually her own and the motor quality is frequently pronounced. D, as S, often dramatizes the selection but with this difference, she herself is the reader and makes the gestures that S sees the visualized reader make. Pitch and voice-inflection are important for D. A strong rhythm effects a striking organic reaction; it may modify respiration and be felt beating in the hand. D, on occasion, finds it quite possible to enjoy poetry as sheer auditory-motor content with little question as to meaning.

D lays great emphasis upon onomatopœia, which plays a very important part in conveying the auditory quality intended. Thus, though the ringing auditory quality of the lines heard often inhibited a more concrete objective image, the word suggesting such auditory imagery would echo, as it were,

[1] "Two Pronounced Cases of Verbal Imagery," *Amer. J. of Psychol.*, 38 (1927), pp. 667-669.

throughout the entire line. The following example illustrates this. The fragment reads :—

> " And the mystic wind went by,
> Murmuring in melody."

In this case the word " murmur " echoes in consciousness to the end of the line. The word itself as a delicate auditory after-image constitutes the accompaniment to the reading. The same effect was noticed with such words as groan, moan, wind, laughing, rustling, music.

While listening to poetry read aloud, D notices little inner speech except where she echoes in her own voice pleasing words, or phrases of which she did not catch the meaning, or those for which the reader's voice did not give the correct inflection. Often her attention is obsessed by the sheer auditory quality of the reader's voice.

A third type to be considered is that of F whose inner speech is purely vocal-motor, with, usually, very little consciousness even of its motor quality. Sometimes during silent reading actual lip-movement is evident. This occurs when the meaning of a passage is not at once evident or where the wording is particularly pleasant. In the latter case F often vocalizes the fragment several times, " half-audibly." Highly agreeable rhythms F finds herself emphasizing by pointing to the words with a rhythmic movement.

Although there is no auditory quality to her inner speech, F sometimes puts the words into the mouths of characters described in the passage. This she does visually ; she knows that a character is speaking by the movements of the lips although she hears no words ; or she is aware that cheering is in progress by noting visually the waving of hats, handkerchiefs, etc.

In general, F gets little meaning from hearing anything read aloud. So little is auditory attention developed that in order to understand she must read to herself. Auditory rhythm is, too, less appreciated than motor rhythm. In listening to poetry read aloud, F shows considerable tendency to repeat in inner speech the words of the reader. She finds difficulty in determining whether this inner speech is due to her understanding of the words read or whether the fragment has meaning because of the vocal repetition. Apparently, F repeats by lines when the meaning is clear, skimming these lines in inner speech ; but when the meaning is not at once evident, she distinctly articulates separate words. Probably motor inner speech is always present under these conditions, but at times is so automatic as to escape detection. When there is particular difficulty in getting the meaning, F sometimes reports visual verbal imagery.

Visual verbal imagery, the fourth type of the inner speech, is of relatively slight importance except for occasional persons. A pronounced case of it was found in A's reactions when listening to poetry read aloud. Since A visualizes the words that she hears read, at about reading distance, there occur some peculiar adjustments of the eyes when the visual imagery of a concrete scene lies at a greater distance. The letters are visualized in dark print, a word or phrase at a time. The back-

ground on which the words appear, A is unable to describe. It seems dark as do the letters, but separated from the latter by a space interval. Besides such visual translation of the words heard, as though she were actually reading them, A repeated the words in kinæsthetic inner speech. This double verbal accompaniment was reported in almost every trial. It became more pronounced when the meaning of a fragment read was not at once evident or when the concrete visual imagery was less distinct than was usually the case. Sometimes words not pronounced by the reader flashed out before the mind's eye as if in explanation or emendation of a passage. This visual inner speech, although with subjects in general a very uncommon form, is an everyday matter with A. Certain fragments were noted as giving charming visual-verbal effects. A curious example of a visual-verbal translation of a synæsthetic fragment came in connection with Swinburne's phrase " Sounds that shine." This phrase immediately appeared to A printed in visual form, and in characters of light.

It is interesting to speculate on the effect of the four varieties of the inner speech upon literary composition. In the absence of controlled observations and reports from literary people, speculation is admittedly subject to much error but tempting none the less. One recalls the report cited by Binet in his " Psychology of Reasoning " :—

" ' When I write a scene,' said Legouve to Scribe, ' I hear; you see; at each phrase which I write, the voice of the person who is speaking strikes my ear. You who are the theatre itself, your actors walk, act before your eyes ; I am the listener and you are the spectator.'

" ' Nothing could be more correct,' said Scribe. ' Do you know where I am when I write a piece ? In the middle of the parterre.' "

One might conjecture that the author for whom the auditory aspect of the inner speech is relatively free might possess great flexibility in imitation of speech rhythms and highly individualized inflections and idioms. His dramatis personæ might speak with varied accent and emphasis, often in a dialect that is personal, if not provincial. In poetry, he would stress the melodic side ; take delight in assonance, alliteration and onomatopœia, or the imitation by sound of that which he would describe. He would, also, be apt to like rime and be able to use it in pinning down his metrical schemes. In drama, he would put into the aside and the monologue material that a more visual person would include in the stage directions.

An author who is acoustic-motor maintains a distinct

consciousness of himself as speaker. His imitation of the speech of others may be much less versatile than that of the first writer, but his inner voice may possess a spontaneity and energy which give it an oratorical coloration, as it were. He, the speaker, barely masks himself by the written word, his are the personal rhythms, the rounded periods. Less dramatic than the auditory-minded person, he is more apt to turn into orator and preacher. It is said that the actors, in certain of Henry James' plays, " were embarrassed by their lines," all the characters talked in the manner of their creator. His own speech became " so inveterately characteristic that his questions to a railway clerk about a ticket or to a fishmonger about a lobster, might easily be recognized as coined in the same mint as his addresses to the Academic Committee of the Royal Society of Literature." [1]

The possessor of a purely vocal inner speech, without the shadow of an accompanying sound, may also realize to a very high degree the sense of agency, of control over his inner so-silent voice. But his phrasing often reveals an insensitiveness to auditory combinations that sets a limit to his stylistic achievements, although he may develop a flowing style of considerable possibilities in the way of rhythm.

The visual-verbal variety of inner speech, is, as we have seen, of negligible importance in reading or listening except as it affords a method of emphasizing words, especially unfamiliar or oddly used words. During composition, however, the visualized word may appear not only for the prosaic purpose of guiding spelling but also for other less evident purposes. There are writers, for example, who find composition by dictation almost impossible. The process of thought seems to be distinctly vitalized by the sight of words and sentences as they make their appearance on the paper. That, to some extent, visible words cause an æsthetic reaction is shown in those cases where poets or prose writers depend for their cues in composition upon the appearance of a written sentence or stanza. Victor Hugo has been cited as greatly dependent upon the visual-verbal form, as keenly sensitive to the " physiognomy " of written words. And Gautier says : " For

[1] Theodora Bosanquet : *The Hogarth Essays : Henry James at Work*, p. 21.

my part, I think that, above all, the phrase demands ocular rhythm."

Modern journalism has developed ocular rhythms into the fine art of headlining. Says a recent commentator on spelling reform: "If we heard the words—but most people do not hear the newspaper. We glue our eyes on a swaying paper, glimpse merely the moustache and eyes of the word!" In advertising, also, we find an appeal rather directly to visual in contrast to auditory reading. In some instances *vers libre* represents largely an appeal to ocular rhythm, hence its facile adoption by advertising, although there probably operates also, to some degree, the mental set induced by shortened lines and the belief that one is reading poetry.

Style responds in a subtle way to various mental habits. The methods utilized in composition are significant in this connection; even so simple a choice as the use in composition of pencil, pen, typewriter, or dictaphone may determine stylistic details. The enlargement of the span of the inner speech by the utilization in composition of the melodies and rhythms of oral speech or highly automatized colloquial habits is in line with the attempt to convey meaning with the least possible demand upon effort of attention. Through social habits, words have become so thoroughly established in certain associative connections that if written composition adopts the style of oral speech, a glance of the eye suffices to convey meaning and to induce apperception of the content. That the mind is active even in the regulation of ocular movements is shown by the fact that the eye moves by big jumps in taking in nouns, verbs, and adjectives familiar to the reader's associative habits but it must fixate more hesitantly in reading prepositions and other connectives. A style weighted with many of these latter parts of speech will be slowly read in comparison with one that makes sparing use of relational words. A written style modelled closely after oral style will require as little effort to understand as your neighbour's gossip about household affairs.

An extensive utilization of oral speech rhythms and habits probably results from the custom of dictating one's compositions. The informal style of such compositions may differ in many details from the closely packed style of laboured

composition. But it may have its limitations; its very transparency may not be an unmitigated virtue since the meaning conveyed may slip off consciousness as unobtrusively as the gossip to which we likened it. The speed with which a composition may be comprehended can not be cited as evidence of all-inclusive merit. It by no means follows that all the effort of attention withdrawn from the form of an article will be given to its content. Content and form are too intimately associated for that. In art, especially, form and content become one and in prose and poetry the intricate interweaving of word and thought may be as essential to the effect of the whole as is the combination of rhythm and tone in music. Limpidity of style may be quite distinct from conversational ease. One can imagine a most profitable utilization of a dictaphone—or several of them!—in the composition of a speech or a series of serials, but it is difficult to dissociate the poet from his quill. The pause in order to put a point on the latter may also result in a pointed phrase or rime.

Does the typewriter affect literary style? A writer in the Boston Transcript thinks it does, that it produces a sort of staccato, disconnected, jerky style; a fleshless and bony style, without the ease and expressiveness of a handwritten product. There is a tendency to use stereotyped expressions, which fall in with one's practice.

To determine scientifically how the method of composition affects style, we should have for study specimen paragraphs on similar topics from the same writer (or a group of them) composed by dictation, on the typewriter, and by hand. We are told by William Lyon Phelps that Hardy's "Laodicean" which was probably the only one of his novels composed by dictation has certain peculiarities in style. Henry James' secretary, Theodora Bosanquet, has given a most interesting account of this author's habits in dictation.[1] The effects of it she considers easily recognizable in his style which became more and more like "free, involved, unanswered talk." He, himself, explained to her "that it seemed to him to be much more effectively and unceasingly pulled out of me in speech than in writing." It's quite possible that nothing more is

[1] *Loc. cit.*

involved in method than the functioning of habits at different levels and that eventually all methods would lead to the same style. Possibly, however, there are deep-seated factors involved, such, for example, as fitting the speed of writing to the speed of thought, which varies from one individual to another. For highly practised typists, composition by machine goes on at a much faster rate than by hand. This high speed may confer a fatal fluency or it may make it possible for the author to catch ideas on the wing. There exist, moreover, some curious differences in the ease with which differen individuals use various musculatures of expression. Some people talk readily but never do acquire a fluent and comfortable handwriting. Their dictated composition has a polish and ease in style not found in their laboriously written paragraphs. Others never acquire skill enough in using a typewriter to express themselves freely while "pounding it." Some object to composition on a typewriter because it interferes with the auditory side of inner speech, but others find the sound of it stimulating. One more citation from Miss Bosanquet concerning Henry James' method of work :—

> "Indeed, at the time when I began to work for him, he had reached a stage at which the click of a Remington machine acted as a positive spur. He found it more difficult to compose to the music of any other make. During a fortnight when the Remington was out of order he dictated to an Oliver typewriter with evident discomfort and he found it almost impossibly disconcerting to speak to something that made no responsive sound at all."[1]

[1] *Loc. cit.*, p. 7.

## CHAPTER VIII

## AUDIBLE THOUGHT

Most of us whisper our asides quite softly to ourselves. Only occasionally when we have reason to believe that we are wholly removed from polite attention—or wish we were—do we indulge in audible thought and talk aloud to ourselves. At this moment I recall only one acquaintance who somewhat persistently but wholly unconsciously voices audibly her parenthetical remarks on life and her friends, always to the surprise and consternation of both her relatives and herself. And this in spite of the fact—or because of it!—that she is saying aloud just what they are thinking silently. Thought echoes are strangely disconcerting.

The inner speech, as we have seen from the preceding chapter, is the main instrument of reflection and of understanding but it plays its part largely off stage, content to be official prompter in life's dramas. Because the inner speech is silent speech the degree to which it can be employed in art, particularly in the novel and on the stage, is a problem of some interest.

The novel, of course, makes free use of reflection and meditation but it only rarely seeks to copy in any realistic way the curious indirections and rambling inconsequences of the inner speech. Meditation is retouched, clothed in literary form. Only in the new art, such as Joyce's "Ulysses," is an attempt made actually to utilize the form as well as the substance of inner speech. There is undoubtedly a field here that will repay exploitation although the old question as to the degree to which art can become photographic and still remain art will arise.

The extent to which the inner speech may be used on the stage is another problem, one which has in the past been debated in terms of the employment by drama of the aside

and the soliloquy. Some interesting differences between dramatists are apparent here although in making comparisons the period differences relative to the type of stage and of stage-settings should not be overlooked.

I owe to Mrs G. Bruce Franklin, Dean of Women, Boston University, the following interesting comparison of Shakespeare and Ibsen :—

" As a matter of technique," she writes, " Ibsen decided to get rid of asides and soliloquies because they interfered with his avowed purpose of never introducing anything upon the stage that could not actually happen within that small area. Therefore, most of his scenes are office, parlour or porch scenes. But soliloquy and aside material will always creep into any play and it must be taken care of. An author may think he throws it away when he only disguises it or serves it up in another form. Ibsen did not throw away this material, he used it in his stage directions.

" Shakespeare gives us an aside of six or eight lines, or a soliloquy of twenty lines if necessary, to let us know the inmost thoughts and the deepest emotions of a character. Ibsen will not permit this but in a very abstract and mathematical way, he catalogues emotions in chronological order and tells his characters to assume or ' register ' them ; for example to act playfully, spitefully, scornfully, exultingly, with quiet intensity, with wild intensity, in spellbound triumph, etc.

" Shakespeare in ' Macbeth ' uses ten asides, nine soliloquies and 149 stage directions. Ibsen in the ' Master Builder ' uses no asides, no soliloquies, but 637 stage directions. Shakespeare's stage directions are all Entrances and Exits but twelve which are more specific, such as, ' Reading a letter,' ' Looking at his hands,' and the like. All his directions, general and specific, are motor in content ; none of them psychological or emotional. In the ' Master Builder ' some forty per cent. (257) of the stage directions are detailed, motor in content, while some sixty per cent. (380) are psychological. Ibsen's directions are never ' Enter ' and ' Exit ' like Shakespeare's, but are detailed, as ' Strolled across room to right, turns and pauses at door,' etc. But what does Shakespeare care about his characters after they have spoken the words set down for them ? They may roll or tumble off the stage in any direction. He gives them the speech, abounding in all kinds of imagery, and gives them the task of working out their own feelings and getting the interpretation across the footlights.

" Ibsen does not give his characters enough words to develop their feelings so in his stage directions he tells them how to feel or rather what feelings to assume. Many times we wonder why certain emotions are written down to accompany certain words. In the end, the audience is left to conjecture why the characters said this or that and why they did thus and so. Seeing a Shakespeare play involves no conjecturing. Ibsen delights in portraying mental conflicts and psychological complexities. He is aided in this to a great degree by his stage directions, as—' with firm assurance, with an incredulous

smile, a gloomy smile, a snort of contempt.' In order to interpret Ibsen these directions are of great value. However, I always feel after reading an Ibsen play that I should retire to a dressing-room and wash off my make-up."

The difference pointed out above between Shakespeare and Ibsen in their use of the aside and the soliloquy might be elaborated in many ways. For example, a Shakespearean character who begins by addressing a speech to another may before closing change to a monologue, a sheer vocalization of the inner speech—a departure foreign to Ibsen.

It might be conjectured that Ibsen's detailed stage directions as, for example,

> " Oswald Alving in a light overcoat, hat in hand and smoking a large meerschaum enters through the door on the left; he stops in the doorway,"

suggest that the playwright is visualizing his characters and seeing each gesture and movement in imagination. Each speaker is addressing some seen listener. Ibsen's directions that his characters rise, sit down again, pace across a room, remind one of the optical-kinæsthetic image that was discussed in a preceding chapter.

No doubt a profitable study of the usages of playwrights other than the two selected might be made, but we shall limit ourselves to recent departures in the new drama of introversion, where a very different use is made of the inner speech from that of the traditional aside or soliloquy. It is used, in fact, as an exposé of the trivial mocking baffled commentary of the inner self released from all repression. It is eavesdropping, overhearing a character think, the nude in auditory art.

Alice Gerstenberg in her single-act play, " Overtones " is credited with introducing the new device. Here each character is accompanied by another self that speaks what is in the mind. Elmer Rice has used the device in " The Adding Machine."

Zero and Daisy are seated opposite one another at an office desk. Daisy is reading aloud figures from a pile of slips; Zero enters them upon a sheet. The monotone of the recitative " Three ninety-eight, Forty-two cents, Two dollars, a dollar fifty," and so on, and so on, is broken by the running comments of the inner speech become audible to the audience.

Zero thinks aloud to himself, " Your face is gettin' yeller, why don't you put some paint on it ? " Daisy communes with herself. " If I asked for carbolic, they might get on to me."

His covert thoughts pursue his wife and a recent unsavoury episode in the apartment house where he lives. Hers centre around possibilities of self-destruction, or a marriage with Zero if he hadn't a wife. Occasionally the thoughts of the two of them collide with their overt verbal automatisms. A slip occurs in the figures they are recording. A correction is impatiently made. Then their minds return to their reveries, to the secret self-pitying day-dreams of a man and a woman inadequate to life.

Eugene O'Neill in his latest play " Strange Interlude " gives each of his characters two sets of speeches : one in the natural voice, the other in a different voice to reveal his thoughts to the audience. During the speeches which represent the inner voice the other characters on the stage become motionless and entranced as though removed from the scene. This two-speech or double-decker device of O'Neill's parallels in an auditory way the use of masks to play up the differences between the outer and the inner self in his " The Great God Brown."

George Jean Nathan writes, commenting on ' Strange Interlude " :—

> " The soliloquy, in general, was and is simply a character's statement to himself of the reasons for an act just accomplished or presently planned ; in the O'Neill play we have meditation and act as things often completely dissociated from each other."

Nathan's description was written prior to the production of " Strange Interlude," but that the revolutionary form is actually effective we may judge from such journalistic comments as the following. After the strangeness and absurdity of the novelty wears off " it dawns upon you that these characters thus made completely revealing, are much more interesting as human studies than the conventional single-minded, flat-voiced individuals who speak much, but reveal little."

In any case the new clinical method of character presenta-

tion is fertilizing invention, a topic which we shall elaborate upon in discussing the drama of introversion. How far such a procedure may be carried and artistic objectivity maintained must be decided by actual trial. In the meanwhile the psychologist in collecting data for scientific purposes may also furnish realistic details to dramatist and novelist. The introspectionist realizes that not half the story of the inner life has yet been revealed.

## CHAPTER IX

## THE WORD-IN-ITSELF [1]

In the early investigations of the psychology of understanding it was taken for granted that the unit of meaning was the individual word. We realize now that we think in bigger terms. We think in sentences, or paragraphs, some of us even in monographs—but not in words. The breaking up of the sentence into words is an act of analysis of considerable subtlety.

Word-consciousness is a much more sophisticated, highly specialized consciousness than is the general speaking or reading or thinking consciousness. But it is the natural consciousness of the born literary artist who in this respect may be sophisticated from the cradle. There may be a native interest in the word for itself alone that is manifested in the earliest years so that the young poet or stylist is charmed by bare words; he would play with them as with tinted jewels.

We must emphasize the statement that one word used by itself is a much richer experience than the same word used in a sentence. The "Word" as a detached consciousness has a tendency to blossom into all manner of images, feelings, impulses. It is a focus of associations, often of exceeding richness. It is haloed with meaning. The same word in a sentence is held rigid in a given scheme of associations. It no longer possesses the youthful possibility of developing into a myriad wonders. It is sober and grown-up and become part of a system of somewhat stolid relationships.

Style swings between vivid word-consciousness and meaning or sentence-consciousness. Scientific style demands such transparency of meaning that each word shall be unambiguously

[1] I have made free use in this chapter of material from my report on "Individual Differences in Reaction to the Word-in-Itself," Washburn Commemorative Vol. *Amer. J. of Psychol.*, 39, 1927. By permission of the Editor.

limited by every other. Oral or written speech shall be only the window through which one catches a glimpse into the scenery of another mind. As we have had occasion to remark before, present-day efficiency demands in the workaday world a style so simple that he who runs may read. There is no time to wait for the meaning to be mediated by concrete imagery; the inner speech must be reduced to the barest flicker. Literary style is, in contrast, often enamoured of ambiguity, of double and triple implication of meaning. Words may achieve separate values. The single word or the phrase of a refrain may sparkle as a jewel in relief against the beaten gold of the setting.

In the long history of mental development the Word-in-Itself has played manifold parts. The *Word* has summoned spirits from the shadows or held demons in awe. The *Word* has been a sacred symbol graven upon the walls of the temple or worn in gold upon the forehead of the initiate. The secret word of Magic has opened treasuries, destroyed kingdoms, made of man a god. The long tale of incantation by means of the Word is not ours to tell; except in so far as the poet and the maker of stories learns too the ancient trick of incantation whereby he liberates imprisoned spirits and through a delicate hocus-pocus opens up charmed realms of fantasy.

The rhetoricians have an apt word for describing the suggestive power of words—connotation they call it, designating thereby the power of words to convey much more than their meaning, their power to create atmospheres, to evoke emotion and imagery and to stimulate activity. Poetic diction is rich in overtones, saturated with fragrance, being differentiated in this way from the more commonplace prose diction in which the thought breaks skeleton-like through the thin garment.

It is an enlightening experience to gather records, as I have, of the varieties of word-experiences. Try out a list of one hundred words on a dozen different subjects and note the reactions you get. What do the different reactions indicate? Much? Nothing?

You will find no doubt the *dictionary-minded* individual. The words you show him call up, in turn, definitions of their

meanings or, perhaps, merely a synonym or antonym or a phrasal completion of the word. You know him for his precision and fluency of language, his discrimination in choice of words. He is, perhaps, of a legal turn of mind, given to making meanings of things, thinking in the abstract, reasoning in words as with counters, swiftly, skilfully, accurately.

You will find the *concrete-minded* person for whom words are merely coin of the realm to be exchanged as rapidly as possible into concrete images. "Fortitude" does not call up the synonymous term "courage" but the picture of a mother singing quietly to her dying child. Words are shadows of things.

> All the various qualities of reality may be mirrored in the image: thus, one subject reports for "drowsy": "Attitude of a summer afternoon on the back porch. Lazy afternoon sounds of bees humming (auditory image) and a golden haze over all." "Roses": "A garden attitude; in the dark; pink; wet against face." And for "flutter": "Birds; felt them beating their wings; attitude of uneasiness."

A most interesting reaction to the word occurs when consciousness is suspended as it were, poised like a rocket that is just on the point of breaking into myriad sparks. The word has richness of feeling; a moment, and it will break into a score of images. This feeling of latent imagery, of incipient associations, is often reported. One laboratory subject was able to pick out the words that, she said, seemed about to release rich imagery. Some of the mood-words, she reports, "would develop into lovely visual glimpses if I should linger on them."

There are others for whom words are *things-in-themselves*. They delight in the mere sight or sound or touch of them. Fantastic as the remark may appear to the spelling-reformer, letters are not merely phonetic values. As *visual stimuli*, in spite of their diminutiveness, they have varying value for attention, for recognition. The silent letter in a word may be just that letter which gives attention-value to the word, makes it recognizable without the agency of the little insignificant sister-sounds.

Word-form, the character of the word as a whole, is determined by the combination of letters that compose it. Three factors enter into word-form, namely, letter-breadth, letter-

height, and the geometrical form of letters. The letters may be classified as those composed of vertical strokes, of curves, of oblique strokes, or of a combination of these strokes. Thus " m " and " t " are vertical letters; " a " and " o " curved letters; " v " and " w " oblique letters; " b " and " d " a combination of vertical and curved stroke. Now a combination of these various kind of letters into words determines, in part, word-forms, which give characteristic affective reactions. Words composed mainly of vertical strokes have a " stiff " appearance, as witness the word " tiff "; words composed of curved letters are more pleasing to the eye, more rounded and complete in appearance; witness the self-sufficiency of the word " psychology." Long letters give individuality to the word-form. Thus " hypocrite " is a more aggressive word than " mirror."

This digression is introduced that the reports of my subjects as to word-physiognomy may not seem utterly outlandish. Certain of them were greatly preoccupied with word-physiognomy. There are words that look ragged or round, or pointed or stout.

> Of the word " reed " one observer says, " This word has teeth—a smiling word." Of " zigzag," " A laughing word; tatters on it, ragged; very disreputable but awfully nice! " Other examples of sensitiveness to word-form are given by the subject who reports: " ' Key ' is an aggressive word, insistent; ' Yule ' is prosperous; ' choral ' is round, the ' o ' is prominent; ' blue ' is compact, inadmissive."

Galton in his " Inquiries into Human Faculty " [1] has given some interesting reports of similar experiences, and Toulouse writes of Zola that he was very conscious of the physiognomy of written words which were for him actual personalities, having their own individual look.

Some interesting laboratory experiments on the degree to which proper names suggest certain patterns of temperament or certain physiognomies have been carried out at Cornell University. The reaction of one psychologist to the name " Grib " may be given. " I had a feeling for him as quickly as I heard the word: Felt ' Grib ' myself, obstinate, persistent, muscular, common sense, as if I would fight for anything I thought mine; would be surprised if anyone should rebel

[1] P. 157, Edition 1883.

against my authority.[1] On the whole it was found that the response to unknown proper names is extremely variable. The emotional type and also associational and attitudinal factors cause great variation in different persons. Professor Claparède in discussing the representation of unknown persons has attributed much of the affective tone to the physiognomy of the proper name. " Other things equal, names consisting of heavy or repeated syllables call forth images of fat, heavy-set, bloated, or slightly ridiculous individuals; a short and sonorous name, on the other hand, suggests slender and active persons, etc. Monsieur Patapoufard would evidently be of a type quite different from that of Monsieur Flic. . . .[2]

An undue sensitiveness to word-physiognomy is probably evidence of a certain amount of preoccupation with the visual word-complex; even though the visualized word is only infrequently reported as entering into inner speech. Certain subtle visual analogies between individual letters and things may set off these reactions, although the form of the word as a whole probably has some effect. The word-form is of greatest æsthetic significance in poetry where a rime-word or phrasal refrain is concerned. Certainly the " Nevermore " of Poe's " Raven " has a visual as well as a vocal form. " More " is one of the most compact words in our language.

That words should be reacted to as *sounds-in-themselves*, sheer music, occasions no surprise. We love to dwell on the long sound of " o," particularly if combined with the music of the liquids " l " or " r " or " n." The word " melody " may charm us by its sound, just as the word " cacophony " sets our ears on edge.

One theory of language formation is the so-called ding-dong theory, that words are coined in imitation of the sounds of nature. The theory is by no means all-inclusive in explanation of the origin of language. Every language seems, however, to include certain onomatopoetic words. In English, such words as " buzz," " hiss," " murmur," carry their meaning in their sound. Our connotation experiment showed a heightened

[1] Alspach, " Psychological Response to Unknown Proper Names," *Amer. J. Psychol.*, 28 (1917), p. 438.

[2] Quoted by English, " Psychological Response to Unknown Proper Names," *Amer. J. Psychol.*, 27 (1927), p. 432

auditory reaction for words such as these, with a keener sensitiveness to their effectiveness on the part of certain observers than on the part of others.

Literary onomatopœia carries us, however, far beyond the mirroring of a natural sound in a word; it is preoccupied with various attempts to imitate emotional and sensuous experience in a collocation of sounds, a sort of programme-music, as it were. To this end it makes use of rhythm and it makes use of rime to pin down a sound-scheme. The sentence is made to drag heavily or to mount on wings. It employs alliteration, that a consonant sound may dominate a verse; and if that initial sound have a sensuously onomatopoetic effect, so much the better. Witness Shelley's incomparable line, "Sweet as a singing rain of silver dew." It makes use of assonance that the vowel sound may be made to colour the consonantal setting. Onomatopœia may be definitely emotional in effect. It may seek to mirror the emotional tone by choice of the properly pitched letters. One cannot pitch one's voice in saying "sob" to the height that it takes naturally in articulating "scream." Nor can the contralto word "throb" be exchanged for the soprano "sing"!

Not all onomatopœia is auditory. In describing pre-occupation with word-form we approached visual onomato-pœia, in which a word not merely looks its meaning; it actually looks the concrete visual image of that for which it stands. Thus the word "laugh" appears to grin; the word "light" dazzles; and the word "bower" looks round; but undoubtedly it is word-form or physiognomy, the effect of one-letter difference, and not visual onomatopœia, that gives such a characteristically different look to "winks" and "wings."

Other forms of onomatopœia there are. Words may be made to tingle on the lips and give a gustatory effect as in that extraordinary line of Keats:—

> "And lucent syrops tinct with cinnamon."

There is also vocal onomatopœia exemplified by the word "gruff" and by Poe's lines:—

> "For every sound that floats
> From the rust within their throats
> Is a groan."

Always, after reading these words, I feel a dull ache in my throat, a dark green roughening, extraordinarily persistent.

Fantastic to some of us comes the report that words may have touch values. A friend of mine of intimate preoccupation with form, shown by a love of geometry and fine workmanship in metal and jewels, once surprised me with descriptions of the tactile and motor values of the word-in-itself. Obviously some of these reactions were reminiscent of the concrete experience with which the word was associated.

> " Buzz," for instance, is said to be a *rough* word, rough to the fingers ; " wing " is a " soft word, I want to lay my cheek against it." The word " jewel " is hard and cold. But other reactions are less easily understood. Of " murmur " it is said, " You can pick up this word and stroke it." Of " yesterday " " this word you can *hold*." " ' Yellow ' has a pulling look ; it would draw me over but can't ! " Of " golden " she says, " I can pick this word up. It's long, flat, and metallic. I can feel the coldness of it."

One is reminded of a passage from Gautier :—

> " For the poet," he writes, " words have in themselves and apart from their meaning, a beauty and value of their own as gems which have not yet been cut and mounted in necklaces, bracelets, rings. The connoisseur who looks at them and fingers them in the little cabinet where they are kept in reserve is charmed just as the goldsmith who contemplates a jewel. There are diamond, sapphire, ruby, emerald words ; others which sparkle when they are rubbed, like phosphorus ; and it is no light task selecting the right jewel of a word."

In our experiment we found, of course, many cases where the connotative value of the word was emotional. Words have a very magic of mood-incantation, as Keats knew when he sang :—

> " Forlorn ! the very word is like a bell
> To toll me back from thee to my sole self ! "

Certain words would seem to have an almost universal power of calling up emotions, creating moods. These words are called poetic words, such as " drowsy," " dusk," " cypress," " jonquil," " woodland." Delicious descriptions of their reactions to them I find in my reports. Thus :—

> " Shadow " is said to give a " tiptoe feeling " ; " dusk," " Self on the edge of everything." Another subject reports of " dusk," " Soft greys and greens and violets melting into one another. Call of a whip-poor-will."

Of "cypress" it is reported, "Arouses a tree-mood; visual image of a cypress dark, tall, isolated; feeling of loneliness and of shadows; word looks remote, chilly, shut-in."

Another subject reports for the word "melancholy," "A green and purple word. Feeling of everything dismal. Birds in rain."

Experimenters on conditioned responses have described to us the process by which words become substitute stimuli in calling out attitudes and emotions. Their interest has centred mainly in the genetic problem of the infant's acquisition of language; they have not yet concerned themselves with the æsthetic reaction. It is not difficult to see how such words as "father," "mother," "flag," become symbols for emotional situations and arouse responses which because of community of experience are thoroughly comparable. It is, however, another matter determining how the delicate connotations of the poet become established in social consciousness. The fact that bilingual children who do not use their mother-tongue in their school work suffer from certain confusions and inabilities in handling words suggests some interesting problems in the genesis of literary expressiveness.

In part, no doubt, the emotional value of words must be due to the arousal through conditioning of the emotion or mood that the thing named would arouse in itself and we react to such words as "twilight," "dawn," "phantom" as we would react to an experience of twilight or of dawn or of the supernatural. Why certain experiences are in themselves poetic is a question that must be reserved for later discussion.

Some subjects report an interesting distinction with respect to the reference given the emotional reaction. The feeling may be projected into the word itself and the reaction become a constant one with literary significance; or the emotional reaction may remain subjective and the reaction a more or less personal one. Thus "melancholy," "sunset," "hiss," are said to be emotional words; but "mystic," "turrets," "jasmine," "nocturne" are atmosphere words. In many cases words get their atmospheric values from literary association. Certain words call up as by magic the whole atmosphere of the Arthurian legends; others tingle with the rude life of Saxon days; others are shadowed by the wistful mysticism of Celtic folk-lore.

"Nightingale," one of my subjects tells me, is a romantic word. "I feel myself standing in an old tower, looking out of the window upon a moonlit night."

An interesting form of connotation was reported by one of my highly sensitive subjects. For her the feeling of a time-setting contributed to the atmosphere of the word. There were words said to be "early in the morning" words, such words for example as "woodland" and "vagabond." "Murmur" and "wind" and "roses" were "late in the day" words. "Kitten" was a "noontime" word; "melody" a night-word.

Word-connotation often takes the form of a colour thought of or actually imaged. Many individuals make extensive use of colour as a symbol, due possibly to emotional conditioning. We are not then surprised to find that words may have colour-haloes, colour-atmospheres so to speak. In some cases a colour association originating in obvious fashion is reported; in others, the response is more subtle. The word may arouse merely a colour feeling, or the word may actually appear coloured on the paper. Thus "yesterday" appears for one reader coloured yellow, possibly because of the initial "Y"; "jealous" seems written in ugly green, no doubt because of a common emotional association. But why should "rhythm" be a pink word or "heroic" a brown one? Why should "drowsy" be rose-colour; "peace," pink; "nocturne" and "murmur" green? "Mystic" is imaged by this same reader as "all colours of hanging veils; with the feeling of pulling these veils aside."

To summarize this very informal report on word-reactions. There are readers who react to the detached word in terms of its precise denotation; they respond with a definition of the word or with a synonymous expression or add other words that further limit its meaning. Others respond with a definite image of the thing named or with a complex feeling of rich content, or incipient imagery. Some readers show a tendency to treat the word as a thing-in-itself, quite apart from its meaning. They react to a word as to a visual form, a tiny arabesque of lines that may release attitudes or feelings as would larger patterns; or the words are felt to be musical tones, appealing to the ear alone, chiming in delicate cadences.

Other words are felt to possess emotional or mood-values rather than intelligible meanings. The distinction between a subjective reaction and a literary one is marked by the distinction made by my subjects between emotional words and atmosphere words. One subject reports: "Emotional words give *Me* a mood or feeling. In atmosphere words this feeling belongs to the words themselves."

Readers who are familiar with Bullough's report of the type reactions to colour and Myers' to tones and music will be interested in finding these distinctions mirrored so clearly in the reactions to words.

Bullough designated his types as follows: (1) the objective; (2) the physiological; (3) the associative; (4) the character.[1] Myers' includes conative experience with Bullough's "physiological" aspect and uses "intrasubjective" as the inclusive term. He, also, extends the "objective" aspect to include all pragmatic references.[2]

The objective reaction to colour consists in a preoccupation with such aspects of colour as its purity or impurity of tone; its saturation; its luminosity; an aspect which may be described in terms of the stimulus. One with such an objective attitude uppermost finds it somewhat absurd to speak of a single colour as mediating or determining preference, much less emotion; he is somewhat disdainful of colour-therapeutics. The physiological reaction is a subjective one, a preoccupation with the bodily or physiological effects of colour. Colours are said to be warm or cold; heavy or light; soothing or depressing. Very strong colour likes and dislikes are reported by such subjects. For the associative type, colour gets its emotional and preferential values from association with the things of the outer world. "Blue" is beautiful as the sky-colour; "crimson" is reminiscent of blood and may for that reason be distasteful. Such reagents refer to colours in terms of the objects so coloured; thus, they speak of leaf-brown, corn-colour, emerald-hues. The character or æsthetic type of reaction is a further development of the physiological and the

[1] "The 'Perceptive Problem' in the Æsthetic Appreciation of Single Colours," *Brit. J. Psychol.*, 2 (1908), pp. 406-463.

[2] "Individual Differences in Listening to Music," *Brit. J. Psychol.*, 13 (1922), pp. 52-71.

associative. It consists in reading the subjective reaction back into the colour itself; it objectifies the subjective aspect, so to speak. I am no longer excited by the colour, rather it is itself exciting or soothing. This æsthetic attitude, this empathic projecting of feeling content into an object, is one with which we are familiar from other reports on psychological æsthetics.

These type-reactions to colour have been cited in detail because responses correspondent to them may be found in our experiment on the individual reaction to words. The dictionary-minded person is obviously objective in type, interested in intellectual meanings that have a common social currency. The associative and physiological types would seem to be represented by observers who concentrate on word-physiognomy, colour-associations, tactile values, auditory onomatopœia. The mood-reaction to a word-stimulus is certainly determined in part by the association of the verbal sign with a given situation. From the associational reaction to the æsthetic one; from the subjective mood-word to the objective atmosphere word, is but a step. The transitional stages are delicately shaded.

Instead of questioning the various possible ways in which different subjects react to a given list of words, we may ask how variously a given individual would react to words of a characteristic difference, to the eight parts of speech for example. What psychological experience, for instance, differentiates the noun-consciousness from the verb-consciousness or the adjective set of mind from the adverb? A most interesting report of such differences has been given us by Eleanor Rowland. "The characteristic feeling of nounness," she tells us, "is of passive surveyance of means without implication of end, or ourselves or anyone as agent, although the functional possibility of the object or idea in question is one of the associations (and a necessary one) that goes to make up the characteristic state of mind." [1]

The verb-consciousness is characterized by motor impulses, by a tendency to respond in action.

Most intimate and personal of all is the adjective-conscious-

[1] "The Psychological Experiences Connected with the different Parts of Speech," *Psychol. Rev. Monog.*, 8, 1907.

ness. It is coloured by immediate sensuous experience ; it is often emotionally toned. " It seems to spread over the whole of me," one subject reports.

The adverb is a second-hand experience, derived from the adjective but much more detached, " far-away." It " has lost the vigorous immediate sense quality of the adjective." To the word " sweet " you react with the actual sensational content. " Sweetly " induces a more passive experience, a reference beyond the self. The implication is of something not oneself.

A preposition-consciousness is peculiarly hard to describe ; the various prepositions are merely unlocalized tensions of various kinds : " a dumb pointing beyond of attachment to something else."

It is interesting to conjecture what results might follow from an application of this interesting analysis to a study of style. We have undoubtedly authors of a predominatingly adjectival style and others who stress the verb-form. Would we find characteristic differences in mental content paralleling such differences in the employment of parts of speech ? Obviously a style surcharged with prepositions makes great demands upon the attention of the reader. Does it point to close thinking upon the writer's part also ?

In further exploitation of delicate literary attitudes let us ask the significance of the letter-in-itself, not, of course, as a carrier of phonetic values but as a focus of associations. The attempt to state connotations for different letters of the alphabet is a very old one. We may even cite Plato in the " Cratylus " where he characterized the rhetorical value of different classes of consonants. The dentals, for example, are said to imitate repose, the liquids to give a gliding effect to style.

In large measure, of course, such characterization of letters must depend upon a delicate perception of letter values as dependent upon the ease, explosiveness or rigidity of the vocal movements involved in the saying of them. Style might well be coloured by vocal kinæsthesis ; in fact, it must be so coloured.

Rossigneux, writing in the " Journal de Psychologie," [1]

[1] *Essai sur l'audition colorée et sa valeur esthétique*, 2, 1905.

has given us a suggestive account of the literary value of consonants and vowels, an account based apparently upon study of literary effects rather than upon experimental analysis. Adopting the theory of emotional equivalents, he states the connotative value of vowels in terms of colours: O evokes red; A, white; U, black; E, blue or green. The vowels evoke colours; the consonants convey spatial impressions; they furnish form and movement. The dentals (D, T, Z) give a statuesque quality, immovability. The labials (B, P, V, F) contrast with the dentals; they are associated with impressions of vagueness, of distance, of movement. Gutturals express force, violence, ardour, rapidity. Liquid M expresses grandeur, majesty, immobility. R has the effect of the gutturals; L approaches the labials and expresses vagueness, gentleness; Z and S evoke vagueness, mystery. The colour effect of the vowels may be accentuated by proper combination with consonants. Thus U and I give the feeling of night, silence, obscurity when accompanied by N, or L.

If one may risk the substitution of examples in English poetry for those given in the French, it is possible to cite lines from Poe in which definite emotive qualities would seem to be conveyed by the prevalence of certain letters. Take the following lines from "The Raven":—

> "Deep into that Darkness peering, long I stooD there, wonDering, fearing.
> Doubting, Dreaming Dreams no mortal ever Dared to Dream before."

How much of the statuesque quality, the rooted-feeling of those lines, is due to the repetition of the dentals, D particularly, (printed in capitals to accent the frequency of its occurrence)?

Another example to indicate the use of F and R to give movement:—

> "Open heRe I Flung the shutteR, when with many a FliRt and FlutteR
> In theRe stepped a stately Raven of the saintly days of yoRe."

In Poe's "The Bells," one has, apparently, vowel-coloration; I is used for the pale silver tinkling bells; O for the golden mellow bells; A for the dark brazen bells—a coloration which does not follow the scheme proposed by Rossigneux.

A similar discrepancy in usage among poets occurs so frequently as to make any constancy of reaction exceedingly doubtful.

In fact, one must recognize the inadequacy of a method which bases conclusions upon personal impressions.[1] We may, therefore, turn at this point to a short review of an experiment by R. C. Givler, in which effort has been made to determine, under experimental conditions, the connotative value of bare sounds. Only a tonal replica of Poe's lines of the nature of those that will be described shortly would enable us to tell how much of their specific toning is due to their meaning; how much to their rhythm; how much to the phonetic values employed.

In the experiment under consideration,[2] Givler made a most interesting attempt to get at the psycho-physiological effect of speech elements as mere tones apart from their setting in a meaningful scheme of sounds; and, to determine the motor and emotional value of the characteristic tonal patterns of a number of English poets. The statistical determination alone of the frequency of various speech elements in English poetry involved the phonetic measurement and tabulation of some 18,000 lines, with, as the experimenter tells us, the enumeration of some 540,000 sounds.

The psychomotor effect of different sound-combinations was determined by the extent of a tapping movement, recorded on a smoked drum, made while the subject of the experiment recited iambic lines constructed on very carefully predetermined tonal patterns. Thus, in one experiment, the psychomotor effect of the long vowels were studied, each of the four vowels appearing in a series of twenty-four experiments in such a way that it was joined in sequence with a different consonant, and with this consonant formed the accented foot of some nonsense combination, as, for example, laBA, a combination of letters repeated five times so as to form an iambic line. Introspective reports accompanied the tapping and reciting of the line. To quote from the report: long " O "

[1] For an interesting experimental report, see E. S. Jones, " Effect of Letters and Syllables in Publicity," *J. App. Psychol.*, 22 (1922), pp. 198-204. Also Roblee, L. and Washburn, M. F.: " The Affective Value of Articulate Sounds," *Amer. J. Psychol.*, 23 (1912), pp. 579-584.

[2] " The Psycho-physiological Effect of the Elements of Speech in Relation to Poetry," *Psy. Rev. Monog.*, 19 (1915), pp. 1-132.

was found to be " more of an object of the æsthetic consciousness, and more associated with the wind and water sounds of nature " than " A." Long " I " was " considerably more intense and forceful " than A or O. " Its pitch seemed at once higher, its utterance less smooth, and the mouth movement more conscious than that of the preceding vowels. . . . It was frequently remarked that this vowel had very little connection with feelings of personality ; the labial consonants had very much more to do with one's self than did the other consonants, and all felt much more intimate than did any of the vowels." " E was the most intense of all the vowels, feelings of strain at once appearing ; but it was also more easily controlled by the muscles of the vocal apparatus than was I. Not so resonant as the O, but it had far more ' colour ' than the A."

One of the most interesting features of this study concerns the metathesizing of lines of English Poetry. From the author's tabulation of the frequency with which various sounds occur in a given poet, a characteristic line, representative of this poet's tonal pattern, was constructed. The following, for example, is given as representative of Keats :—

" Nĭ rŭl sŭ vēēd rĭ nĕst ĭt ĕl ĭth rēēn."

In other series of experiments, tonal replicas of single lines from the chosen poets were studied and also ten-line patterns. It is evident from the introspections of the subjects that tonal effects are much more closely related to the meaning-content of certain lines or passages than is true for others. The metathesizing of Byron's " Roll on thou dark and deep blue ocean, roll," is cited by the author as a decided success. It reads as follows :—

" Shŭn dōle ow rŏd thū närk blōre ō lănd ēēp."

Of nine subjects, seven respond with some form of ocean-imagery, although, of course, all were unaware of the original whose tonal pattern was thus reproduced.

In general, some very characteristic results for different poets were obtained. The graphs from the tapped records also showed individuality. For example, the Byron graphs

were indicative of greater length of tapped stroke than the Keats ; and the Tennyson than the Arnold.

The general conclusion is that the sounds of poetry, especially those of lyric poetry, are able of themselves to arouse " a mood congruous to that of the original poem, even when torn from their positions and their rhetorical anchorage." " Poetry is largely tonal." Furthermore, the lyric poets are found to employ liquid sounds to a high degree. The author writes " Name the lyric poets and you have named those not only whose lines transmogrify (metathesize) best but also those who will produce in these tappings, as recorded in the graphs, the finer form quality of the curve of motor discharge."

The content of poetry, say the " symbolistes," is emotional subtlety, delicacy of sentiment. It is close kin to music ; should, perhaps, be identified with it. It is a groping out from the world of daily reality into the shadows of the infinite and the remote. It conveys no information, may indeed convey no explicit meaning ; rather, it seeks to mirror dimly as in moonlit waters faint shadows from another world. It would stir the imagination of the reader, set vibrating delicate soul-fibres unthrilled in daily life. It would leave the shaken soul suspended in the creative void. But it cannot accomplish such an aim by the use of the brutal paragraphs of ordinary prose, or the sharply turned verse of the poets of the precise. It must create a new manner of communication. Therefore, it creates the Word-in-Itself, tears it from its traditional meanings, its old habits of syntax, and uses it as evocative of moods or even as a purely musical sound. It searches deliberately for strange words, new or archaic ; it violates the conventionalities of rhythm and of grammar ; it seeks to break the bonds of everyday language that it may evoke imaginative realization. " The emotion which symbolism pursues," writes Eccles, " bears no constant relation to the objects represented or the ideas expressed ; rather it aims at the recovery of vanished moods by curious incantations, by the magical use of verbal atmosphere."

A forest is described, not as green but as blue. Only those flowers are poetic which are exotic, perfumed with the mysterious east or redolent of poisonous marshes ; only those

women inspiring whose beauty foreshadows disaster, hints at waywardness.

Says one of the critics of symbolism: "Their thoughts, cloudy, fugitive, swirling take on the colour of the regnant emotion, just as the smoke that hangs over the crater of a volcano reflects the red from the bottom of the abyss." There is no logic of idea; rather an apparent incoherence most abhorent to a mind enamoured of clarity. But this incoherence is deliberately sought as a means of creating obscurity, mystery, a sense of the profound. It is no evidence of the poet's failure that the same phrase arouses different images, different meanings in the mind of different readers provided that these varying images are emotional equivalents.

But why carry the doctrine to its extreme? Must meaning be altogether banished in order that one may deal with emotional values? We may, of course, reject the function of communication as provincial, and adopt if we choose a cosmic language of the soul, a secret language of the infinite. We may be so enamoured of the inarticulate as to be dumb, isolated. Silence may be conceived to be the most poetic form of expression, a conclusion inherent in the doctrine of certain of the "symbolistes."

It may be that with the increase in rapidity of reading which comes with increased dependence upon the sight of the whole sentence rather than upon the sound of the separate words, such "precieux" poetry will not only cease to be written but also cease to be appreciated. Mystic poetry may become a lost art; music may usurp its function, become the sole auditory art; the one expression of the outcry of life against too great scientific preoccupation, too fatiguing precisions of thought; the one embodiment of the vague desires, the ecstatic emotions of the human heart. But, poignant as it is, music is limited in its expression; it cannot give us the delicate nuances of the wistful romances, the strange voyages of the spirit. There are those of us who would mourn the loss from the world of the lyric note of the Word-lover.

# Book IV

# THE METHOD OF STYLE

## CHAPTER X

## THE METHOD OF STYLE

To gather records of the responses of readers to poetry and prose is only a matter of time and discovery of methods for carrying the analysis to the finest possible point and controlling the conditions under which observation is to be made. To determine what lies back of the reader's reaction in the mind of poet or fabricator of stories is quite another matter. If autobiographical material as to certain outstanding features in the process of composition is tantalizingly meagre, still more inadequate are reports as to the details of the mental content that carry these processes. Poets do not present themselves at the laboratory as willing subjects of investigation particularly when in the throes of composition. Mostly they look askance at " those nutcrackers of the soul," the analytic psychologists.

Later, we shall attempt to ferret out certain features of the creative process itself. At present we are concerned with the possibility of drawing conclusions as to the mental furnishing of the poet's mind from his readers' reactions.

This method of passing from the reader's mental content to that of the author he is reading is known as the *Method of Style*. It has borne the fire of heavy criticism. The early employment of the *Method of Style* was charmingly ingenuous at a time when the newly aroused interest in the various forms of imagery and the turning of the attention of the individual to his treasury of mental visions and sounds led to all manner of premature conclusions. In those early investigations the preoccupation with the notion of an *Imagery Type* led to a desire to discover this type as a part of every psycho-

logical analysis and in the case of a prose or poetical writer it seemed possible to infer his type from the images that were aroused in the reader by perusal of a given production. Any reader who was interested in the question saw no difficulty in deducing the author's imagery from a tabulation of his own reactions while reading. Scepticism developed, however, when a comparison of the reactions of different readers showed that very different conclusions would be drawn depending upon who did the reading. A poet that one reader might decide was visual in type would by another be called auditory and so on. Moreover, the conclusions drawn from tabulation of a given amount of material were almost sure to need correction when compared with conclusions drawn from tabulation of a greater amount of material. Criticism of the *Method of Style* developed inevitably.

This criticism crystallized two tendencies: (1) the tendency to reject the *Method of Style* as absolutely worthless, since, it was contended, the imagery aroused by reading depends absolutely upon the reader's capacities and in no way mirrors the poet's mind; (2) the tendency to reject any hasty or ill-considered application of the method but to maintain that it is possible to draw conclusions relative to poet or prose writer from a sufficiently comprehensive and comparative study of the imagery aroused in a *large* number of subjects of a *known* type of imagery.

From a tabulation of the images of one reader of perhaps a hundred lines no conclusion may be deducible; from the tabulation of the images of dozens of readers of a several thousand lines valuable conclusions may be drawn. The amount of work that a truly adequate investigation would require is somewhat appalling.

The same remark may be made for a modification of the *Method of Style* which we may call the statistical word method, a method utilized in most comprehensive fashion by Professor Groos, widely known for his contributions to æsthetic theory. In the application of Groos' method by himself and his pupils [1]

[1] " Die optischen Qualitäten in der Lyrik Schillers," *Zsch. f. Aesth.*, 4, 1909; Die akustischen Phänomena in der Lyrik Schillers," *Zsch. f. Aesth.*, 5, 1910; " Psychologish-statistische Untersuchungen über die visuellen Sinneseindrücke in Shakespeares lyrischen und epischen Dichtungen," *Englische Studien*, 43, 1911

statistical tables were made by means of which one could determine how often in 10,000 words in Schiller or another given poet determined colours or sounds were used, all words being taken at their face value. Different periods in the life of the poet were compared on the basis of the percentages obtained; or different types of work were compared as the lyric, the epic, and the dramatic. Thus it was found that in Goethe's literary life the relation between the coloured and colourless light-words remained approximately 1 : 3.

Close comparison may be instituted between the optical and acoustic words in a given poet or the usage of one author may be compared with that of another. Thus Schiller's youthful lyrics are found, when compared with Goethe's, to show double the number of optical qualities. In both poets there occurs a gradual decrease in the use of "red" which is at first most frequent, and an increase in "green." In comparison with other poets Schiller shows a predominance of auditory terms so that one conjectures that Schiller belonged to the acoustic type. Acoustic terms in Schiller are twice as frequent as in Goethe; and seven times more frequent than in Shakespeare's Sonnets. Of particular interest to students of English poetry is a statistical study of sensory terms in Shakespeare's lyric and epic poetry. 100 Shakespearean sonnets yielded 65 optical qualities to 230 for 100 sonnets of Rossetti. With sufficient material one might characterize whole epochs.

In this method the question arises as to the relation between a poet's literary material and his mental qualities. In tabulating a poet's vocabulary we are listing objects thought of, not mental states. Obviously, considerations other than sensory data determine the choice of words. The chosen literary form, stylistic considerations, expressive capacity of the poet and that of his times all determine his vocabulary. Helen Keller, devoid though she is of sight, is able to use sight-adjectives in a most subtle and descriptive way. So a mentally-blind poet might use current terms of visual significance as mere literary material.

Stählin,[1] in criticism of the work of Groos and his school,

[1] "Zur Psychologie und Statistik der Metaphern," *Arch. f. d. Ges. Psychol.*, 31 (1914), esp. section 2

urges that a given sensory word cannot be listed as inevitable evidence of sensory content. It may be used metaphorically, not literally; have emotional value rather than sensory significance; it may be mere verbal ornamentation. Cautious analysis must accompany all psycho-statistical investigation.

We may, however, raise the question of relation of imagery to text from a slightly different standpoint, that of *effective literary suggestion*. Whatever may lie back of the word in the mind of the writer, we can, at least, determine the success of the suggestion in arousing an image in the mind of the reader. In certain experiments of mine in which images from the reading of some four hundred lines were tabulated from the reports of a dozen readers, it was found that, if we except visual and kinæsthetic imagery, the following order represents the success with which images of a given kind were aroused through direct suggestion: auditory, 46·8 per cent.; olfactory, 39·3 per cent.; cutaneous, 35·5 per cent.; organic and pain, 30·7 per cent.; gustatory, 14·2 per cent. Literary workers may find it of interest to learn that there are certain forms of suggestion that are almost always successful. Certain auditory images are particularly easy to arouse. The sound of rain and of the bugle-note; the sighing of the wind and the rush of wings; the noise of the surf; the tolling of a bell are imaged without difficulty.

The following bit from Keats is almost invariably successful in arousing auditory content:—

> "Where their own groans
> They felt but heard not, for the solid roar
> Of thunderous waterfalls and torrents hoarse."

For arousal of olfactory images, vague allusions were found to be less effective than were specific suggestions. Thus, if the odour of the violet or hyacinth be suggested, it is more apt to be successful than the vague suggestion contained in the words "field smells known in infancy." Yet Swinburne's phrase, "perfume of songs" was effective for six of twelve readers. The smell of the rain, of wet grass, and of damp earth, and the fragrance of flowers were reported very often. Sometimes the images of flower-odours were reported as specific, such as the image of the fragrance of the hyacinth, of the rose or of the poppy. Certain odour images

were, however, describable only in vaguer terms, as " funeral flower " odour, " heavy flower " odour or faint sweet odour. Such odour images recall the generic images so familiar to us in visual imagery.

Gustatory images were an infrequent form of reaction. The more definite the suggestion the more likely it was to succeed. Keats again furnishes us with an example of highly effective gustatory suggestion :—

> " Also, when he would taste the spicy wreaths
> Of incense, breath'd from sacred hills,
> Instead of sweets, his ample palate took
> Savour of poisonous brass and metal sick."

These lines also illustrate a device very frequently utilized by Keats, namely the *repetition* of a suggestion of a particular kind.

The mention of wind or rain is a very effective method for the arousal of cutaneous imagery. The suggestions of warm rain, soft breezes, sodden ground, cold bare shoulders were highly successful. Organic reactions may also be easily induced through literary suggestion as by Shelley's lines :—

> " 'Tis scarce like sound, it tingled through the frame
> As lightning tingles."

In our discussion of effective literary suggestion we have thus far been considering direct suggestion ; images of various kinds may, however, be aroused through indirect suggestion or connotation. While auditory images would seem to excel in percentage of direct arousal, the cutaneous excel in percentage of images aroused indirectly. Lines descriptive of either wind or rain are apt to call out tactile images though the wording does not directly suggest such images. Subjective dispositions of the reader are, of course, prepotent in the case of images indirectly aroused and yet in the case of certain lines the suggestion is implicit. For example, we find olfactory images a common accompaniment to Shelley's line :—

> " A light of laughing flowers along the grass is spread."

Let us now turn from the reader to the poet and determine his success in giving each kind of suggestion, with a reminder, however, that we have only a limited amount of material at our disposal. In my experiments I considered five poets only : Keats, Shelley, Poe, Swinburne, and Blake. Of these

poets, Poe gives the highest number of successful auditory suggestions; Shelley, the highest number of successful olfactory suggestions; Keats, the largest number of successful cutaneous images; Poe, the greatest number of successful organic suggestions, with Shelley but slightly inferior. Literary critics have often commented on Shelley's preoccupation with odour and his frequent use of it as literary material and on Keats' penchant for cutaneous experience. The results of actual tests evidence the skilful use by these poets of their favoured material. Poe's successful use of auditory suggestion is not surprising to a reader of his works; one is, however, curious as to the characteristics of his style which gives him such a high power of arousal of imagery indirectly, particularly in the case of olfactory and cutaneous imagery.

Another curious element of Poe's style is the fact that he induces in his reader an optical-kinæsthetic reaction much more frequently than a posture or a movement reaction. That is, he arouses visual images of objects seen in movement as by those lines:—

> "Banners yellow, glorious, golden,
> On its roof did float and flow."

Moreover, Poe's optical-kinæsthetic images are, relatively to the number of fragments (or the number of lines), more frequent than was the case for the other poets. This preoccupation with visualized movement I have long thought a general characteristic of Poe's poetry. The results of experiment would seem to show that such an interpretation is not merely a matter of individual reaction.

Swinburne and Keats give the greatest excess of felt kinæsthesis over optical-kinæsthetic images. This, again, is a result that might have been anticipated since the rhythmic quality of Swinburne's poetry and the "statuesque" quality of Keats' have been matters of comment.

In number of visual images Poe, Shelley, and Keats excel Swinburne and Blake—a statement which holds whether the proportion of images be reckoned for number of fragments or number of images. Relatively to the vividness of the visual imagery which is aroused, Poe and Shelley seem to excel.

The question of plastic or ordered and diffluent or emotional

imagination may be raised again in connection with the poet's type of invention. On the basis of the present tests the only assertion that may be ventured is that Poe with his excess of visual images and particularly of optical-kinæsthetic over felt-kinæsthetic images, appears to be plastic in imagination, as in fact he has been described. His method of composition, if we may trust his own reports, was highly self-conscious, a fact of great interest in the present connection, and one to which we shall refer again.

## CHAPTER XI

## THE POETRY OF COLOUR

" Look now where Colour, the Soul's bridegroom, makes
The House of Heaven splendid for the bride."

NEVER perhaps in its long history has the philosophy of beauty found more splendid phrasing than in George Meredith's " Hymn to Colour." Nor is the meditative heart reluctant to accept colour as fit symbol for the transcendent Beauty of the philosophers. Less fitful is it than music, less preoccupied with the ache of the will-to-live ; more transfused than even the most lovely of curves with infinitude of meaning.

Again to quote Meredith writing of Colour, the bridegroom, and of the Soul, the bride :—

" He gives her homeliness in desert air,
And sovereignty in spaciousness ; he leads
Through widening chambers of surprise to where
Throbs rapture near an end that aye recedes,
Because his touch is infinite and lends
A yonder to all ends."

But, indeed, elsewhere than in the land of dawn one may ask how colour prepares a home for the wayfaring Soul. And one discovers a yet more intimate beauty in colour when reviewing the slow process by which primitive man spelt out its elements and learned to recognize and treasure its manifold meanings.

A curious chapter in race psychology traces the awakening of the savage mind to the suggestions of colour and shows how colour symbolism is surcharged with all the intimate details of everyday life and everyday needs. Red, the colour of flame and of the day's auspicious end and threatening dawn ; the colour of ripening fruit and of the maiden's glowing cheek and scarlet lips ; the colour of blood, symbol at once of the lust and the dread of battle : yellow, the colour of sunlight and of garnered grains and precious metals ; red and yellow the colours that first caught the attention of

primæval man and dominated his first crude æsthetic efforts. Vermilion and ochre stains on his naked person testified to his awakened sense for colour. And, later, the royal robe was dyed scarlet and the wedding-robe was saffron in hue. Different customs for different races. Yellow as the sacred colour of the Oriental races, green as the chosen hue of the Nomads of the Desert. But for the European races a steadfast evolution, with, at first, a strange ignoring of the hues of green and blue and violet, a strange ignoring, indeed, since these are the colour-tones dominant in the summer world and in the shimmer of mysterious seas.

In fact, so meagre in colour words is the otherwise rich language of the Greeks that excellent authorities have inferred a racial colour-blindness, a complete insensitiveness to certain spectral colours. More convincing, however, is Havelock Ellis' speculation that the colour discrimination of the Greek and not his colour-vision was at fault and Ellis' most interesting contribution to the psychology of colour is his surmise of the cause of the sudden awakening to interest in the blue end of the spectrum about the time of the Christian era.[1] By that time red had become well established as the colour of battle and dominion, and yellow, once the colour of the bride, had become the symbol of illicit love whose priestesses bordered their robes with saffron and gilded their yellow hair. In revulsion from both, the Christian world turned its pleading eye skyward to find the lovely blue which thereafter became sacred to the Madonna, the queen of heaven.

Spengler, for whom colour, just as architecture or philosophy or mathematics, is conceived as a symbolic expression of a given psychic interest explains in a different fashion from Ellis the variant colour preoccupations of the classic and the succeeding culture. Of blue and green, the colours of sea, sky, shadows, remote mountains, he says that they are atmospheric and not substantial colours. They are cold, they disembody, evoking impressions of expanse and distance and boundlessness. For this reason they are kept out of Apollonian art, since infinite space meant complete nothingness for

[1] "The Psychology of Red"; *Pop. Sci. Monthly*, 57 (1900), pp. 365-375 and 517-526; "The Psychology of Yellow," 68 (1906), pp. 456-463.

classical feeling and " the use of blue and green with their powers of dissolving the near and creating the far, would have been a challenge to the absolutism of the foreground." For the Faustian Soul, blue and green are " monotheistic colours," those of a present that is related to a past and a future of destiny." [1]

The poetry of colour, whose thrill is to a certain degree reminiscent of the long homing of the race on the earth, is, again, in certain measure dependent upon the response of our bodily frames to those vibrations of sense that the human brain transmutes into colour. That the physiological effects of colour stimulation upon the human organism are striking and worthy careful consideration is recognized to-day. Perhaps all that we can assert with confidence is that red and yellow excite the organism and increase its muscular strength; green and blue sooth and calm the nerves.

Psychologists, Bullough, for example,[2] whom we have previously quoted, have sought accurately to determine the feeling-value of different colour-tones. This feeling-value depends not only upon the physiological reactions to colour stimulation suggested above but also upon such associational factors as have been prominent in the development of racial colour-preferences and others that are significant in the development of the individual. It is readily seen how variations arise in the colour-preferences of individuals. Even so, there remains a fairly constant emotional value for any given colour. Red is exciting and frank, the colour of warmth and of love, of luxury and of anarchy. Yellow is gay, suggestive of exuberance and of merriment; the sacred colour of the Orient, in the symbolism of the west, it stands for jealousy. Blue is the colour of serenity. It symbolizes constancy and reserve. It suggests depth, atmosphere, profundity. It is the colour of the spirit, as red is that of the flesh. Green, too, is soothing, a symbol of aspiration. And what of purple and violet? Their feeling-value is uncertain. Shall purple perhaps be conceived as the excess of red, and violet be

[1] *The Decline of the West.*

[2] " The ' perceptive problem ' in the æsthetic appreciation of single colours," *Brit. J. Psychol.*, 2 (1908), pp. 406-463. See also, for a penetrating treatment of colour from a different angle, Richards, *loc. cit.*, p. 153 f.

thought of, as by Lafcadio Hearn, as the colour of the Unknowable, as the colour of the Holy of Holies ?

In the study of colour symbolism or of individual variation in colour preferences, the use of colour by the poets is of particular interest. Probably the most frequently tabulated item of the poet's vocabulary has been that of his colour-words. But an interpretation of statistical returns is difficult since the poet not only uses colour as a delicate symbol or because of his innate love for it but also because of the sound-values of the colour-names themselves. Colour adjectives are often woven of inextricably blended fibres, visual, auditory, emotive. Yet, too, the realistic motive in use of colour should not be overlooked ; the nature poets may seek the one colour adjective that is actually descriptive of the natural effect that preoccupies their attention. It is not difficult to find illustrations of these various uses.

Red, as we have seen, is a sensuous colour ; a pagan colour, according to Christina Rossetti. Though red tones delighted Keats, the word " red " occurs in his poetry but rarely. He delighted in its variants, rose and crimson, scarlet, ruby, and vermilion. Rose for him is the love-colour as it was for Meredith, also, who sings of Love's " rosy memories." Swinburne, it is, who uses the word red to excess, fascinated by the pure tone of blood-red. This is the colour of the passion of love, the colour of storm and of ruin. The too sensitive organism of Shelley found red stimulation excessive, painful. The word red suggested dread passions ; the horrors of war, the terror of burning homes ; but crimson was reminiscent of dawn and beautiful with the fires of dawn.

Green, as Keats uses it, is the lovely colour of grass and of summer woods ; for Swinburne, it is the colour of April, the colour of hope. He sings : " For love the red, for hope the gentle green." Strange it is to note how Swinburne, apparently oblivious to the wonderful blues of the sky, is quick to discern the exquisite green that at times blooms there in " the sweet green spaces of the soft low sky." Meredith, too, knew the exquisite sky-green of dawn.

> " But love remembers how the sky was green,
> And how the grasses glimmered lightest blue."

If blue be indeed the colour of spirit, of distance, it is not

surprising that Shelley found here his colour of colours, that he delighted most of all in the azure of the sky and but a little less so in the earth-green and the sea-emerald. Blue and green commingled are the colours of sky and ocean, these two great aspects of nature that mixed so inextricably in Shelley's world and flooded his eyes with wide and glorious vision. Hear Ocean singing in his lyrical drama :—

> " The loud deep calls me home even now to feed it
> With azure calm out of the emerald urns."

Green shot with golden light wove a spell of enchantment for Shelley. How often does he seek to mirror the fairy-like hue, green and golden light slanting through tangled leaves or dropping from folded lilies.

The dependence of the poetic imagination upon racial and historic sentiment is shown in the long banishment of the word yellow from the poet's vocabulary and the substitution of the word golden except where a disagreeable connotation is desired as in Keats' " deadly yellow spleen " and Swinburne's " yellow jealousy." Yet the excessive use in poetry of the word golden testifies to the deep love of the poet for the colour of sunlight, and of amber. Only those who have listed the number of times that the word golden occurs in the poet's vocabulary can appreciate how the poet, as the Byzantine painter, would have his delicate figures bloom against a background of dusky gold. Nor is it surprising to discover that among poets Rossetti, the poet-painter, is especially enamoured of the word.

But the Nature-poets cannot submit to the ban on the word yellow. Note how Meredith, the lover of the bounteous earth-mother, rejoices in her harvest colours : " Yellow oats and brown wheat, barley pale as rye." How much his own is the nut-brown colouring of his verse, the keen eye that marks the blue-necked wheat, the bronze-orange leaf.

Purple and violet have served the poets but little in a descriptive way. To be sure, purple clothes the mountains at nightfall, shadows the deep waters under a sombre sky, darkens the hue of heaven at midnight. Mostly, however, the poets have found in purple the colour that expresses excess of passion and extravagance ; they have used the

word with symbolic force as in Keats' " purple-lined palace of sweet sin " and his " purple riot " of the heart. Purple is the dominant colour-note of " Sonnets from the Portuguese," where it symbolizes the royalty of love, as witness the kiss that is folded down upon the lips of the Beloved in " perfect purple state."

In the use of the adjectives, white, grey, and black, colour symbolism is particularly apparent. White for the poet has a double connotation. As the colour of the bloodless and of the cold it is allied to death, hence Tennyson's " death-white curtain " and Shelley's " shadow of white death." But it is also symbolic of purity, virginity, and dazzling radiance as in Swinburne's " white dreams," his " glory of white wings," his " sun-child whiter than the sunlit snows."

Grey is the most subtle of symbolic adjectives. It is the colour of weariness, of age, and of fear ; hence, grey miseries, grey lips, grey fruits. Grey is the toning of " Andrea del Sarto " :—

" A common greyness silvers everything."

Grey is also the saintlike colour and it is fitting that the Soul of the artist in Rossetti's " Hand and Soul " should be garmented in grey and green. And grey is the colour of achievement, for one may be " grey with glory more than years." Black is the colour of all things dread ; of black blight, black thoughts, black thunder, and black years.

Sometimes all descriptive value fails the colour-adjective as we have stated before and it is used with delicate connotative value. Thus the poets have coloured the winds for us, silver and red and black. They sing of the " yellow yesterdays of time," of " green immortality," of the " green buds of sorrow," of the " green dream of Paradise " ; they celebrate " music's golden tongue " and " passion's golden purity " ; a " golden and beloved soul " or " The golden answer to the deeply willed."

Poe with his penchant for symbols found such use of colour alluring. His poetry reveals a meagre colour vocabulary and a conventional use of such words in descriptive work but also a skilful use of colour-adjectives when emotional toning is concerned. His prose, too, shows the employment of

colour symbolism in the communication of evanescent and delicate feeling-values. Else wherefore his careful setting of his scenes? The shadowy tapestries that stir so uneasily in the melancholy House of Usher; the living curtain and carpet of golden tissue amid whose glory the Stranger in Venice by the Sea dies so ecstatically for Beauty's sake? Nineteen of his first twenty-one tales of the horrible are laid wholly or chiefly in the night-time, usually at midnight or in the blackest night.

The poet may, however, use colour in the simplest of fashions; he may even use the redundant or implicit colour adjective whose meaning is inherent in the noun qualified. Thus he may sing of green grass, yellow bees, silver stars, underscoring as it were the colour quality. Or he may indulge himself in delicate observation of the hues and tints of earth and sky, exhaust his colour vocabulary in his effort to find the final word expressive of the exquisite tone-colour of the spring leafage, the faint autumnal hyacinth of an inland sea, or " that greyish-green that Nature loves the best for Beauty's grave."

The nineteenth century has given us our great colourists in poetry. Keats and Shelley stand unexcelled; the one revelling in rich gorgeous colouring, the other in rainbow tints shot through and through with light. It is the first who sings of the casement in the baronial castle that its panes were :—

> " Innumerable of stains and splendid dyes,
> As are the tiger-moth's deep-damask'd wings."

And the second exclaims of the comforting spirits in " Prometheus Unbound " :—

> " See how they float
> On their sustaining wings of skiey grain,
> Orange and azure deepening into gold :
> Their soft smiles light the air like a star's fire."

No bare adjective carries such colouring as this; it is woof and warp of the verse itself, the myriad-coloured blossom of the music of words.

The poet may indeed use his colour-adjective for its musical value alone, for its assonant, alliterative, or rime quality. Such a choice of colour words is particularly noticeable in the auditory poets such as Shelley and Poe. Frequently

the former conjoins azure and isle and azure and chasm as in " azure chasms of calm " and " the azure isles where sweet wisdom smiles." And Poe's sensitiveness to alliterative sound explains much of his phrasing ; his purple perfume, his velvet violet lining, his ebony bird, his moon-tints of purple and pearl. It is when we consider the musical quality of colour-adjectives that we discover why certain colour words have been discarded by the poet. For instance, the word pink occurs so rarely in poetry doubtless because deficient in melodic quality. We understand, too, why golden and silver are so essentially poetic, the one because of its long " o " and the other because of its consonantal setting. Difficult indeed is it at times to determine the meaning-value of silver, so inextricably are the auditory and visual blended in such phrasing as silver sound, silver light, silver sapling, or in the line from Masefield :—

" A star will glow like a note God strikes on a silver bell."

Those pioneers who are attempting to create a new art, that of colour-music, have stimulated much discussion of the analogies between colour and sound. Their points of departure have been somewhat diverse. Some have deemed it sufficient to question the affective values of colours and to determine, if possible by experimental means, the elementary colour preferences of large groups of people. Others have centred their attention on colour symbolism which, as we have seen, possesses to some degree general validity. In any case we have the curious phenomenon of an attempt to create a new art by laboratory and analytical methods. But art is so largely concerned with perceptive and imaginative wholes that one anticipates success only in terms of a discovery of form-correspondences between visual and auditory configurations.

Spengler, discussing the Soul of different Cultures, criticizes the conventional classification of the arts as purely artificial and physiological. He believes that the formative impulse at work in the wordless arts can only be understood when we realize that the distinction between optical and acoustic is only a superficial one, that their inner form-language is the same. " A ' singing ' picture of Claude Lorrain or of Watteau does not really address itself to the bodily eye any more than

the space-straining music since Bach addresses itself to the bodily ear." Tones are extended, limited and numerable just as lines and colours are ; harmony, melody, rime, and rhythm are of the same essence as proportion, chiaroscuro and outline.

It is possible that analogies between sound and colour, or, indeed, between any varieties of sensation are very thoroughgoing. Delicate patterns of perception may be involved in such a way that one may conceive of them as moulds into which one may run any sensory material whatsoever. In the next chapter we shall have occasion to discuss in some detail that curious cross-circuiting of the senses which in its extreme form is known as synæsthesis and which, when its secret is discovered, may contribute to the creation of the new art of colour music.

## CHAPTER XII

## THE CONCORDANCE OF THE SENSES [1]

Art critics rejoice in such expressions as colour-harmonies, melodic lines, frosty music, fragrant nocturnes, loud greens, singing blues.

The poet, too, as Masefield :—

> " For all together sang with throats
> So tuned, that the intense
> Colour and odour pearled the notes
> And passed into the sense."

The significance of such confusion of sense modalities has aroused much discussion. Does it evidence degeneracy of style ? Is it a lovely florescence of language, delicately evocative of emotion ? Is it rooted in actual experience so that we may conclude that poets and imaginative writers are especially subject to that malady of the senses wherein they become short-circuited, so to speak, and one sees sounds and hears colours ?

There is in existence a voluminous literature on synæsthetic experience, of which there are many varieties, *audition colorée* being the most common. Of this, many illustrations might be given. I content myself with one only, the case of a girl, who, when listening to a telephone call, sees the colour of the voice of the speaker. " She sees this colour with varying degrees of vividness as the speaker's voice fluctuates. Rapidity and enthusiasm of speech make the colour bright and intense as a fanned flame, while a sad or depressed voice glows dully as the smouldering ashes of a dying fire." [2]

Other curious confusions of sense occur such as gustatory audition in which sounds become tastes, so that one may speak appropriately of a banana voice ; or tonal vision, in which

[1] In this chapter I have made free use of material in my report on " Literary Synæsthesia " in the *J. of Phil., Psychol. & Sci. Meth.*, 9 (1912), pp. 490-498. By permission of the Editor.

[2] Student's report.

light and colour change into music or into simple tones as for the poet who could hear the pitch of the crescent moon.

A number of explanations have been suggested for synæsthetic experiences. One of the most common is that they originate in ordinary association of things conjoined in experience or of common emotional toning. The difficulties in the way of this explanation are (1) the vividness of the secondary associated experience which seems to be, in many cases, an actual sensation, and (2) the fact that this secondary sensation is not within the control of the person experiencing it. Others hold that synæsthesis is rooted in a reversion to a more primitive nervous condition before clear-cut sense distinctions had been evolved ; or that it is due to privileged pathways in the brain ; or is the outcome of pathological conditions. Some psychologists explain it in terms of hallucinatory experiences and psychic dissociation ; the psychoanalysts scrutinize it as a clue to repressed emotional complexes ; lately the investigators of eidetic imagery have been re-examining the phenomenon from their particular angle, and the exponents of colour music exploiting it in the hope of discovering some clue for a colour scale.

In this connection we wish to make one point only, namely, that there would seem to be cases of true synæsthesia and cases of pseudo-synæsthesia. In the former, the confusion of the experiences is at the sense level—in the latter, at the imaginal level. The man who actually *sees colour* when he hears music must be distinguished from the man who *images colour* or merely *thinks* it. " U " is a blue letter for me ; but I do not see " u " as blue, I merely think it as blue.

Coloured sensation is rare but not so coloured thinking. There are many persons whose thoughts or images of the months of the year or the days of the week or of Christian names are always coloured. Sounds, if they arouse colours, arouse them on the imaginal rather than the sense level. Every letter of the alphabet—or it may be the vowels only—is thought of in its appropriate colour. Sometimes, the colour of words is a mixture of the colours of the letters that compose it, sometimes, the vowels give the colour-tone to the whole word ; sometimes, words have their own colour-tone distinct from that of their constituent letters. In any

case a collocation of words may present to one's inner vision a coloured pattern—a sort of wall-paper of thought. Christian names are particularly apt to appear in thought coloured. To many persons it seems not at all grotesque to speak of Elizabeth as a blue name or of Louise as a brown one. To others, the only thing grotesque in such a manner of speaking lies in the choice of colours. Wholly individual, indeed, seems the particular colours associated with particular names or letters. "A" may be black or brown or blue or yellow; "E" may be blue or red or pink or gold. Lafcadio Hearn, who experienced possibly a true synæsthesia, writes, "The readers do not feel as you do about words. They can't be supposed to know that you think the letter 'A' is blush-crimson, and the letter 'E' pale sky-blue."[1]

Just why the letters of the alphabet, especially the vowels, should associate so readily with colours and take from them an emotional and æsthetic toning is something of a mystery. Rhetoricians who write of vowel-colour do not expect their words to be taken too seriously. Quite serious, however, was the French artist who planned a dramatic performance in which vowel, colour, perfume, and orchestration should be in perfect accord, each the subtle echo, the other-sense counterpart of the other. The theme chosen was the Song of Solomon. One recitative was phrased in "i," illuminated with golden light, perfumed with the incense of white violets, set to music in D. Other recitatives brought other concordances of vowel, colour, perfume, and music. This somewhat fantastic experiment was foredoomed to failure chiefly because there is no accord even among those individuals who think in colours as to the appropriateness of the colours chosen. To the man who has no such turn to his thought the whole experiment must seem futile to a high degree.

Psychologically, the attempt to treat together cases of true synæsthesis, in which sensations of a given sensory quality regularly and uniformly arouse sensations of another sensory tone, and cases of so-called coloured thinking or the employment of sense-analogies in a figurative or reflective way, has induced some confusion. Each of these topics is undeniably

[1] *The Japanese Letters of Lafcadio Hearn.* Edited by Elizabeth Bisland

interesting and may be related to the other in ways not yet thought of, but, at present, each demands separate treatment.

Let us inquire to what extent true synæsthesis is to be found among poets, and then question the æsthetic value of an exchange of sense-qualities and the extent to which such transfer is employed by imaginative writers.

The objection may be raised that, apart from a personal examination of a given poet, it would be impossible to answer the first question, for in appeal for answer to the poet's works we cannot with certainty distinguish between spontaneous and deliberate analogies. The objection is undoubtedly well taken. None the less, the attempt to answer the question allures one. It seems scarcely possible, for instance, that a poet, who experienced a systematic case of coloured hearing, in whom, that is, sound uniformly and constantly aroused colour, would fail to show this peculiarity in descriptive writing. Every one will recall Rimbaud's " Sonnet of the Vowels " which, it must be confessed, sounds somewhat sophisticated. Baudelaire's insistence upon sense-correspondences and Maupassant's confessions are scarcely more convincing. Gautier and Alfred de Musset, however, undoubtedly give us genuine examples of *audition colorée.* Leaving, however, the French poet and *littérateur* to the mercy of the French critic and psychologist, I have found it interesting to make a somewhat detailed study of certain English poets in order to determine whether or not their poetry shows any evidence of systematic or sporadic arousal of one sensation by another. To gather material for this study I have recorded every case of sense-analogy in 20,000 lines of English poetry ; 4000 lines each for Shelley and Keats ; 2000 each for Blake, Rossetti, Swinburne, George Meredith, Browning, and Poe.

Only one unambiguous case of synæsthesia was discovered. Poe, singing of the sound of the coming darkness, adds in a footnote to " Al Aaraaf " : " I have often thought I could distinctly hear the sound of the darkness as it stole over the horizon."

There are also curious passages in Poe's " Colloquy of Monos and Una," a tale which is a conversation after death between Monos and Una, in which Monos describes the process of dying, or the feelings after death. " The senses were un-

usually active, although eccentrically so—assuming often each other's functions at random. The taste and the smell were inextricably confounded, and became one sentiment, abnormal and intense. . . . The eyelids, transparent and bloodless, offered no complete impediment to vision. As volition was in abeyance, the balls could not roll in their sockets—but all objects within the range of the visual hemisphere were seen with more or less distinctness ; the rays which fell upon the external retina, or into the corner of the eye, producing a more vivid effect than those which struck the front or anterior surface. Yet, in the former instance, this effect was so far anomalous that I appreciated it only as *sound*—sound sweet or discordant as the matters presenting themselves at my side were light or dark in shade—curved or angular in outline. . . .

" As these (*i.e.*, figures) crossed the direct line of my vision they affected me as *forms ;* but upon passing to my side their images impressed me with the idea of shrieks, groans . . . you alone, habited in a white robe, passed in all directions musically about me. . . .

" Night arrived ; and with its shadows a heavy discomfort. It oppressed my limbs with the oppression of some dull weight, and was palpable. There was also a moaning sound, not unlike the distant reverberation of surf, but more continuous, which, beginning with the first twilight, had grown in strength with the darkness. Suddenly lights were brought into the room, and this reverberation became forthwith interrupted into frequent unequal bursts of the same sound, but less dreary and distinct . . . ; and, issuing from the flame of each lamp (for there were many) there flowed unbrokenly into my ears a strain of melodious monotone."

Except for the one instance of tonal vision Poe gives no other example of clear-cut synæsthesia in his poetry and offers few examples of striking sense-analogies. Once he forms a pretty conceit of a goddess's song carried to heaven as odour and he describes the sparkling Echoes that flow through the door of the Haunted Palace in terms of visual personification.

Movement, as I have suggested elsewhere, vivifies Poe's imagery to an extraordinary extent. He delights in wingéd

odours, floating banners, ethereal dances. This preoccupation with movement affects even his description of things auditory. He images a gush of melody welling from sounding cells; he sings of floating ditties and of groans that float; and in "Lenore":—

> "No dirge will I upraise,
> But waft the angel on her flight with a pæan of old days!"

Such descriptions of sound in terms of movement frequently evoke a visual interpretation. Sometimes even a complete translation of sound into vision is effected, as by one reader of the line quoted above who saw the music following the angel in a stream of light. Such translation by Poe of sound into movement and a retranslation by the reader into visual terms perhaps accounts for the fact that Poe, more than any other of the chosen poets, aroused synæsthetic experiences in his readers.

Next to the one attested instance in Poe, Swinburne's poetry furnishes the best evidence for a possible synæsthesia. It is Swinburne's peculiarity to deal with simple sense-qualities in an abstract and emotional way with results very unlike the plastic and pictorial effects produced by poets of another type. It is this abstractness from perceptual quality that accounts for the peculiarly elusive and monotonous effect of Swinburne's poetry. Swinburne's preoccupation with simple sensational tone might well furnish opportunity for the expression of true synæsthesis and such we possibly find. Light and music are used as almost interchangeable terms. He sings of sounds that shine, and of song visible. His is the line: "Light heard as music, music seen as light."

Swinburne's synæsthetic phrasing, although often dismissed by his readers as unmeaning, derives so much beauty from its association with melodious words and rhythmic cadences that, preoccupied with the delight in sheer word-music, they often surrender all demand for meaning. Swinburne's frequent attempt to render song visible is, however, rarely successful, although there are readers who make the transfer, as one who images visible music as tiny motes flying in the sunlight and another who sees the blue, not of the sky, but of the music, shining through rifts in fleecy clouds.

The sense-analogies of William Blake are difficult to qualify. Blake, as Swinburne, has an odd way of describing things heard in terms of things seen but, unlike Swinburne, Blake's shift is at the perceptual level rather than at the sensational, as when he speaks of a virgin clothed in sighs. His description of the auditory in visual terms is often felt to be ridiculous or unmeaning, as in the line :—

> " And all thy moans flew o'er my roof, but I have
> called them down."

Translated into definite imagery, this fragment becomes absurd, as was reported by one reader to whom the moans appeared as pigeons. A slight blurring of the imagery so that merely vague flying creatures of some sort are seen renders the imagery more supportable.

The lines :—

> " Sweet moans, dovelike sighs,
> Chase not slumber from thine eyes,"

again bring visual personification of one sort or another. The one reader who reports a literal translation finds it charming. The vaguely outlined moans and sighs, evanescent visual flashes of grey, are felt brushing the eyelids in a faint flicker.

Although tonal vision is a very rare form of true synæsthesia, it is the most frequently imitated pattern in poetic analogies. It is a favourite not only with Swinburne but also with Shelley who, singing of the coming morn, asks :—

> " Hear I not
> The Æolian music of her sea-green plumes
> Winnowing the crimson dawn ? "

And, again :—

> " This is the mystic shell ;
> See the pale azure fading into silver,
> Lining it with a soft yet glowing light ;
> Looks it not like lulled music sleeping there ? "

There is, too, a noteworthy description of the nightingale's song in terms of the bird's circling movements, a description which may issue in an interpretation of the song as circling light. One reader reports, " I see the music as rings of light twist up into the sky where suddenly they break and fall to the ground in a shower of stars."

In general, Shelley's readers find his sense-analogies most beautiful. They do not often make the translation he suggests, but they find their imagery enriched by all manner of delicate connotations. Where, for instance, the silver and azure of the mystic shell are said to be like lulled music, one does not translate colour into sound, but surrenders, instead, to a delightful relaxation such as is induced by soft music, or else one visualizes the shell to the accompaniment of orchestral strains or to that of the ocean-murmur resounding faintly in the shell's pale whorls. Again, one may not hear the Æolian music of the dawn, but may see, instead, the wind pluming itself among the dawn-clouds or may hear the sighing of the morning breeze. The descriptions are at once of things seen and heard together, and, therefore, the appropriateness of the double imagery, as in the line :—

> " Whose waters like blithe light and music are."

The French exponents of literary synæsthesis are fond of quoting a celebrated passage from Shelley as evidence of the translation in his mind of music into odour. It reads :—

> " . . . music so delicate, soft and intense,
> It was felt like an odour within the sense."

And in another place :—

> " Thine old wild songs which in the air
> Like homeless odours floated."

Not only is music translated into fragrance, but also, in turn, odour is described in visual terms. Thus the odours that lie visibly above the flowers suggest the vision of tiny clouds that carry the perfumed incense of flower and forest.

The many forms assumed by Shelley's odour-similes suggest that the conversion is literary, not spontaneous. Readers frequently react to them with olfactory images, in themselves highly pleasant.

An actual transposition of visions and sounds into odours has, so far as my knowledge goes, never been reported at the psycho-physiological level, although odour has been known to change over into colour. Shelley's departure from the facts of true synæsthesia again suggest an imaginative use of

sense analogies rather than a genuine duality of sensory impressions.

The same remark holds for Swinburne's line :—

" Thy voice as an odour that fades in a flame."

In general, the fact that coloured hearing which is a not uncommon psychic experience is so rarely imitated in poetry suggests that literary synæsthesis is somewhat removed from the psycho-physiological variety. When sound is described as light, the vague colour-adjectives, silver or gold, are used rather than the highly specific colour-names found in reports on true coloured audition. A few examples to illustrate :—

From Swinburne :—

" Fine honey of song-notes, goldener than gold."

From Sara Teasdale :—

" Music like a curve of gold."

From Vachel Lindsay :—

" By hymns of living silver, songs with sunrise in the rime."

One looks in vain for many lines similar to Teasdale's :—

" Up from the village surged the blind and beating Red
music of a drum."

But even in the latter case, the context shows that the word " red " is suggested by the covert thought of war and blood, and not by the sheer tonal quality of the drum-beats.

In Keats' poetry we find a preoccupation with gustatory and tactile quality, a preoccupation which is also found in his sense analogies, which are at times most unpoetical as in the lines :—

" O turn thee to the very tale
And taste the music of that vision pale."

An effective phrasing is that in which he sings of the " velvet summer song " of the wind, lines apt in the arousal of tactile imagery. The most noted of his synæsthetic lines are the following :—

" Lost in pleasure, at her feet he sinks,
Touching with dazzled lips her starlit hand."

It is significant that a reader who makes an almost hallucinatory translation of the words into light localized on the lips finds the lines highly pleasant. Other readers comment upon the phrasing as fantastic.

Keats' " dazzled lips " recalls Swinburne's " blind lips " and Blake's " blind hand." The latter phrasing is exceedingly effective for those who see through the delicate finger-tips and who, consequently, appreciate the reality of that most terrifying and ruthless blindness, tactual blindness—the unshielded and untender intimacy of contact with the Unknown.

The statuesque quality of much of Keats' imagery, in contrast to the dance and buoyancy of Poe's flitting visions, also exemplifies his preoccupation with the tangible. Poe often describes sound in terms of movement ; Keats, on the other hand, frequently conceives music as tangible, material, as in the wonderful lines—lines which yet perplex many readers :—

> " A haunting music, sole perhaps and lone
> Supportress of the faery-roof, made moan
> Throughout."

Such a cursory review as the above of a few chosen poets leads to the conclusion that while there is very slight evidence that the chosen poets experience true synæsthesia, there is some justification in concluding that they enjoy, more than the ordinary reader, analogies between the senses. It may be stated as a principle of interpretation that an analogy which the average reader finds forced and unmeaning probably represents a peculiar but natural, rather than reflective, mode of thought for the poet. We may, then, interpret Swinburne's tonal vision, Poe's phonism of the night, Blake's visions, and Keats' " dazzled lips " as due to individual idiosyncrasies, while Swinburne's organic toning of phrases (" And swordlike was the sound of the iron wind ") Poe's kinæsthetic analogies, Keats' tactual imagery, and Shelley's odour and auditive similes are literary and imaginative in significance.

It is an interesting outcome of this survey of sense-analogies that in an indirect and, therefore, desirable fashion it confirms certain inferences based upon a more direct application of the *Method of Style*. The chosen poets enjoy embellishing their figures with a favoured form of sense-

experience; odour for Shelley, touch for Keats, movement for Poe.

The present discussion has concerned itself largely with highly fused dual impressions. Deliberate and explicit comparisons are, of course, also common. A few examples may be cited :—

From Masefield :—

> " I have seen dawn and sunset on moors and windy hills
> Coming in solemn beauty like slow old tunes of Spain."

From Amy Lowell :—

> " You are beautiful and faded,
> Like an old opera tune
> Played upon a harpsichord."
>
> . . . . . .
>
> " And the perfume of your soul
> Is vague and suffusing,
> With the pungence of sealed spice jars."

It is quite possible as we have suggested in discussing colour music that a more intimate understanding of the inner form-language, of perceptive and emotive patterns, may give us a better comprehension of sense correspondences. Synæsthesis should be investigated by the new configurational methods. It might repay the investigator to study the transfer of sense adjectives from one sensory field to another in the course of the evolution of language and to compare extensively the explicit substitutions that are found in deliberate sense similes and analogies.

Synæsthesis may, it should be observed, be systematic, that is constant in appearance under given conditions, and uniform in quality, or it may be sporadic, occur, that is, only occasionally. While synæsthetic experiences are not pathological, yet they are known to result from stimulation by drugs or to accompany the excitement of fever. It may be that the poet in creative mood experiences subtle fusions, emotional totalities that lead to a spontaneous synæsthetic phrasing in his poetry, incomprehensible to the average reader.

Synæsthesia has sometimes been understood in another sense by literary critics who are interested not at all in the problem of sense-confusions as the psychologists understand

it but only in the coloration of style. They have had much to say about clang associations by which they mean an association between a colour and the vowels that predominate in the name of the colour.[1] For example, an association between "a" and black; yellow and "o"; "i" and pink. According to Amy Lowell synæsthesia has literary value only when based on such clang associations. She quotes with approval Fletcher's poem on "The Vowels" because it is worked out on the basis of such associations, as in the lines:—

"A, flaming caravans of day advancing with stately art
Through pale, ashy deserts of grey to the shadowy dark
of the heart."

This poem of Fletcher's shows the degree to which one can give colouration by playing upon the vowel dominant in a colour adjective and choosing such images as shall call up objects so coloured. One further example to illustrate this:—

"E, parakeets of emerald shrieking perverse in the tree,
Iridescent and restless chameleons tremulous in the breeze,
Peace on the leaves, peace on the sea-green sea,
Ethiopian timbrels that tinkle melodiously."

[1] *Tendencies in Modern American Poetry*, p. 293 f.

## CHAPTER XIII

## POET AND PSYCHOLOGIST

UNFORTUNATELY for the experimentalist, it is not often possible to summon poet or novelist to the laboratory for an intensive examination. Occasionally this has happened; in France, for instance, as in the case of the exhaustive study of Zola by Toulouse;[1] or in the rhythm experiments conducted upon Amy Lowell at Columbia University.[2] Besides direct examination it is, however, possible to make ingenious use of the interrogation point in other ways. If patient enough the psychologist may have recourse to statistical investigations, such as were described in the preceding chapter, or he may study other productions of the poet or may question the poet's art theories. We find the assumptions of the latter paralleling in very subtle fashion the introspections of students in the psychological laboratory, a most instructive parallelism, all the more because, for the most part, the student is ignorant of art-theory and the poet-critic ignorant of psychological questionnaires.

At risk of violating my own conclusions concerning the undesirability of attempting to draw deductions about a poet's mind from a perusal of his poems I propose to hazard certain conjectures relative to a few poets, appealing when possible to their own confessions masked sometimes as theories of poetry.

Let us first seek to analyse the mental stuff of Vachel Lindsay. It would seem composed largely of motor, organic, and auditory content, although there is also a wealth of fluidic visual images. This motor and organic material is rhythmically organized. Lindsay's preoccupation with motor rhythm is evidenced not only by the character of his verse but also by observation of his movements during recitation

[1] Émile Zola.
[2] Patterson, W. M., *The Rhythm of Prose* (2nd Ed.), p. xii f.

of his poetry. It appears also in his drawings, drawings in which the arabesques, the flowing designs, the complication of lines impress one as a projection on paper of his own weaving gestures and steps. Even his use of the human figure is fluidic, involved in the swirl of movement. His flowing verse with its constant repetition of the "motif" and occasional staccato gestures in the form of booming rimes is a replica in auditive form of his rhythmic motor patterns. Lindsay's imaginal content can project itself in pantomime or poster or poem; it is difficult to think of him producing sculptural effects.

Lindsay's delight in hyperbole, of which I shall have more to say later, is another evidence of obsession by motor and organic imagery, so, too, his empathic identification with the objects he describes. His imagination is definitely diffluent, rather than plastic; his constructions are emotionally or organically motivated as are those of the dance. Precision of time relationships in presentation is much more emphasized than spatial relationships. Note, for example, his curious handling of the latter. Relative size is dictated much more by emotional emphasis than by a millimetre stick. He is copying mental images, not objects of the outer world.

One suspects that much of the ripening of Lindsay's ideas goes on below the threshold of consciousness although he protests that he is "no improviser." His symbolic meanings as used both in his designs and in his verse suggest something of the child-like naïveté of Blake's. His "Soul of the Spider," "Soul of the Butterfly," and "Soul of a Flea" suggest a spontaneous mysticism.

It is interesting to compare the analysis just given with Lindsay's own account of his mental development, an account not read until long after the analysis was made. In opposition to the prevailing notion that he is a student of phonetics, Lindsay urges that it seems reasonable that his verse be judged "not as a series of experiments in sound, but for lifetime and even hereditary thoughts and memories of painting," a sentence which is followed by the story of his ambition to be an artist and his training in drawing.[1] He

[1] *Collected Poems.*

states as an astonishing fact—and a most revealing fact it is from the psychological point of view—his eventual discovery that he could draw better from memory than from life. What Lindsay is obviously doing in his drawings is to project, graphically, inwardly felt motor tensions, hence the strong urgency toward expression. Clear-cut visualization may exist without such urgency but a predominatingly motor organization as Lindsay's will seek outlet in some form, in his case in three forms, drawing, pantomime, and verse, the latter often composed, one suspects, aloud. In the diffluent imagination auditory and visual content often melt into one another, dissolved by organic and motor tensions, the secret of much poetic synæsthesis. Lindsay, from the psychological point of view, is neither visual nor auditory in make-up, he is primarily motor.

In contrast to Lindsay we have the highly self-conscious technique of Amy Lowell, clearly aware of what effect she wishes to produce and how to obtain it. Here we have the plastic imagination in a developed form. Such an imagination delights not only in pictorial but also in sculptural effects. Movement enters into its imaginal stuff, but it is movement *seen* rather than *felt*. You creep with Lindsay's black men through the jungle but you watch the slow movement of the lady's hand through the water in this lovely bit from Lowell :—

" A woman sat beside the water
In a rain-blue silken garment.
She reached through the water
To pluck the crimson peonies
Beneath the surface,
But as she grasped the stems,
They jarred and broke into white-green ripples,
And as she drew out her hand,
The water-drops dripping from it
Stained her rain-blue dress like tears." [1]

Movement for Miss Lowell is always on the verge of hardening into something solidly visible. Thus :—

" The pool is edged with the blade-like leaves of irises.
If I throw a stone into the placid water,
It suddenly stiffens
Into rings and rings
Of sharp gold wire." [1]

[1] Quoted by permission of Houghton, Mifflin Co. from *Pictures of the Floating World.*

As we have already seen, the distinction between movement felt and movement seen is very fundamental and may in the future serve as a clue in determination of psychological differences implicated in the conscious and non-conscious processes of creation.

Miss Lowell's presentation of the case for the Imagists and the wealth of visual material in her poems have resulted perhaps in too narrow a conception of her imaginal capital. Judging from my own experiences in reading her poetry and from comments in her book on *Tendencies in Modern American Poetry*," she belongs very definitely to what the psychologists would call a mixed type although with a dominance of visual material. Her definitely visualized and highly coloured scenes echo with manifold sounds, and are invaded by fragrances. There is much evidence of preoccupation with touch and temperature images, another sign of the sculptural imagination. Always, spatial relationships are delicately conceived and accurately impressed upon her content. Such clear-cut definite effects remind us of the Greek imagination in contrast to the Hindoo.

Miss Lowell as protagonist for the Imagistic School of poetry has objected to a too narrowly conceived interpretation of its purpose such, for instance, as the notion that the Imagists are word painters. Imagism, she affirmed, is a kind of technique rather than a choice of subject. But she failed, possibly, to realize how deeply rooted artistic method is in imaginal and emotional predisposition.

Let us note Miss Lowell's own exposition of Imagism, passing over for the time such matters as its use of a particular vocabulary or verse-form.

The aim of Imagism, Miss Lowell states in *Tendencies in Modern American Poetry* is to present an image, for although not a school of painters imagists believe that poetry should " render particulars exactly and not deal in vague generalities, however magnificent and sonorous." They criticize for this reason the cosmic poet who fails to face the real difficulties of his art. Our aim is " to produce poetry that is hard and clear, never blurred nor indefinite." Imagism is presentation, not representation ; it seeks to mirror perceptions not washed-out, generic, fluctuating images.

This stressing of observation, of perceptual attitude, has borne interesting fruit in certain poets and in some of Miss Lowell's own departures. Such developments are definitely akin to those of modern schools of painting, and to appreciate them it is necessary to get away from the matter-of-fact assumption that a world of objects simply exists and that all one need do is to open his eyes upon them. The development of perceptual possibilities in the child and possibly in the race is a long story. Virtuosity in the way of sensing colour in shadows, form in clouds, unity of line in flowing draperies and blowing trees, and in intersecting planes has come as an achievement not a gift. Likely enough it originates in the keen sensitivity of those most richly endowed in the way of sense-organs who, however, pass on their discoveries to their neighbours and so sharpen racial discrimination for colour, form, tone. The world of bare sense qualities has, it is true, at the bidding of very substantial needs such as those for food and shelter, crystallized into pretty solid objects common to all people. But it was not so in the early days of life when neighbouring sense qualities might interpenetrate and be clipped off by consciousness in patterns different from the conventional ones of the everyday adult. Neither need it be so, for the racially nonconformist mind of the hypersensitive artist who demands freedom to break up his sensations as he chooses and to synthesize them into new patterns. The unity of an object is constituted by the purpose dominant in the mind of him who perceives. If I am thirsty I see the orange on the tree as a distinct bit of colour that promises a satisfying taste and organic content; but if a painter I may sense it merely as a high light in the globing green, or as a scheme of interlacing circles.

To break with the fundamental racial purposes in our creation of a world of objects is to risk breaking connections with the group with which we live but there is always a possibility of a later reunion with consequent enrichment of the former world. At any rate twentieth-century artists have been experimenting with all manner of novel ways of seeing the world and in the Post-Impressionists, the Cubists, and Futurists have given us new patterns of perception. The

permanence of their work will depend upon their success in assuming really vital points of view.

It has been said that the Imagists are seeking to do in poetry what modern artists are doing on canvas and in the sense that they are dealing with subtleties and novelties of sense-perception, this would seem to be true. There is a playing with light, colour, line and plane. Particularly is this noticeable in the poetry of John Gould Fletcher, who describes nature with a delicacy and power of perception that should greatly enrich our vision. Take this bit of description of trees from Fletcher's " Green Symphony " :—

> " With whirling movement
> They swing their boughs
> About their stems ;
> Planes and planes of light and shadow
> Pass among them,
> Opening fanlike to fall."

Or his marvellous description of the effect of cloud shadows :—

> " Silver filaments, golden flakes settling downwards,
> Rippling, quivering flutters, repulse and surrender,
> The sun broidered upon the rain,
> The rain rustling with the sun."

We have here an obsession with delicate and individual observations which baffles and confuses the reader who is preoccupied with his own schematized and simplified mental images which are often generic in meaning and to that extent less concrete and realistic than such highly individualized percepts as we get in Fletcher. How far one will enjoy such poetry depends very largely probably upon one's own mental habits, or the degree to which he has entered into new realms of art, according to Amy Lowell. The last two lines quoted above describe so inimitably for me certain natural effects that I resent Untermeyer's characterization of the passage as chaotic.

But, of course, individual psychic differences are operating, no less in the critic than in the poet, as evidenced by Untermeyer in " The New Era in American Poetry " when he speaks of Imagism as assaulting the eye, an over-insistence " on what should be seen, and not hear," irritating the optic nerve by " acrobatic leaping from object to object." " Their credo,"

he writes, " seems to discount and decry the possibilities of normal vision."

For " normal vision " substitute " conventionalized perception," and we strike in Untermeyer's statement the innermost heart of Imagism, as I understand it, namely, an attempt to sharply individualize its observations, and to do this somewhat objectively, with an unlimited range of material to work upon in the world of nature. Whether or not such poetry results in eye-strain depends upon the readers.

Amy Lowell's strictures against the " cosmic poet " just as Untermeyer's against the " Imagist " grow out of her own mental prepossessions. The emotional in opposition to the perceptual method in art deals primarily with generic rather than highly individualized images. It employs the diffluent imagination which achieves its purposes by use of vague, organically-toned images which suggest rather than picture. Although enamoured of mystery rather than clarity, it is, none the less, an authentic type of imagination, Oriental rather than Greek. Oppenheim's " The Runner in the Skies," is a perfect example of cosmic poetry :—

" Her feet are on the winds where space is deep."

We have had occasion earlier to comment on the theories of those critics who would conceive of poetry as an auditory art mainly, a species of verbal music. Here, too, no doubt, certain prepossessions fostered by individual capacities are mastering the critic. Percy Mackaye insists that it is not essential that a poem be written but it *must* be spoken or sung. " The cadences, the harmonies, the seizure by the imagination upon consonants and vowels, sounds which subtly evoke the human association of centuries—these are addressed to the ears, not to the eyes, of his audience."

Poetry as emotional draws largely upon the vocal and verbal element. But it has also most subtle ways of creating dynamic and dramatic effects by its utilization of vivid organic sensations which are shunted by the most skilful sleight-of-the-poet's-hand from one situation to another. The technique of emotional spread we shall canvass in a later chapter.

# Book V

# ATTITUDES, PSYCHIC PATTERNS, THE LOGIC OF THE EMOTIONS

## CHAPTER XIV

## ATTITUDES AND MENTAL PATTERNS

Did you ever wake up in the morning all " set " for your Saturday programme to find that you had slipped a cog somewhere, and that it was necessary to transfer to your Friday pattern ? You may even have been " set " to hear church-bells and be greeted instead with the fish-horn proclaiming the weekly sail. (I meant sale, of course, but two mental sets collided and caused the undignified lapse, an unsolicited example of what I'm trying to explain.) In any case external pressure may succeed in pushing you back into Friday in spite of your Saturday or Sunday frame of mind, but all day long you're teased by a feeling of having mislaid yourself.

A review of the plot-feelings that characterize the seven stories of the book of the week would be an excellent way in which to acquaint one's self with the kind of mental stuff that we are now to study. When listing and describing in somewhat static terms the psychic material of which literary dreams are made—the concretely patterned image in its many modalities and the verbal transcript whether isolated words or flowing inner speech—I insisted not only upon the evanescence of imaginal content, its extraordinary complexity, and the possibility of its functioning in fragmentary and syncopated forms but also upon the fact that a description in static terms does violence to the dynamic, fugitive onrush of thought, its quicksilver-like darting from one point of stress to another.

Our images detached from their setting are like butterflies mounted in a museum, lovely curiosities, but devoid of the

flutter and flight of life. In actuality they occur in a quivering context of relationships, a medley of fluctuating processes. In the discussion of imagery we intimated that there are psychologists who, recognizing the inadequacy of current descriptions of consciousness, insist upon our recognition of a different sort of thought-stuff, what they call imageless thought, naked thought. In its extreme form this doctrine would seem to mean that we must recognize an element of the cognitive life other than sensation or image, namely, a non-sensory thought-element. Of course, this non-sensory element cannot be described; translated into words it becomes garmented.

The opponents of the imageless-thought theory contend that its supporters do not sufficiently realize the comprehensive possibilities of words and of organic and kinæsthetic sensations as a carrier of meanings. Nor do they appreciate the degree to which an image may be schematized, fragmentary, or attenuated and yet function efficiently. Your inner speech may be so telescoped as to sound to the inner ear as " m'm'm'm " and yet carry meanings well enough. Imageless thought may, they insist, represent the final term in automatization of a process, a feeble flare of light before the plunge into the dusk of the purely physiological.

However the basal proposition of the supporters of imageless thought may fare, their hypothesis has, as we have urged in our discussion of images, immeasurably enriched our knowledge of mind by its insistence upon the significance of the sense of relationship, the fragmentary state, the pattern of consciousness. In its search for the naked thought it has discovered many curious other things. It has led to recognition and analysis of conscious attitudes, or totalities of feeling that sum up the patterns of our reactions to most complex situations. It has shown us, moreover, the much wider participation of the unconscious in thought than we had been accustomed to grant. We know now that determining tendencies, purely neural in nature, may condition the whole course of thinking. We realize that a purpose or a problem may be wholly turned over to the physiological and yet determine the drift of consciousness to the last degree.

Let us illustrate a little further some of the more subtle mental states before turning to the problem of the unconscious.

Take, for illustration, those delicate feelings of relationship which you isolate when you snapshot a reaction to an isolated preposition or conjunction. Observe, please, your feeling of " therefore " or " but " or " on." You will probably find on analysis that your meaning for these terms is carried by motor and organic material. As for myself, I find my sense of the meaning of " if " carried not only by an incipient articulation of the word with a rising inflection as though other words were to follow but also by a tentative lifting of the eyebrows and a slight holding of the breath. But, of course, meaning is more than the kinæsthetic carrier of it.

Mental attitudes are similarly garmented but more complex and stable. They are the unanalysed fringe of many an experience. Note, for example, the state of mind into which you are thrown by the sudden apparition of a ? or an ! Punctuation marks are, in fact, nothing more or less than pictorialized attitudes. Doubt, bewilderment, acquiescence mark our passage through a paragraph of prose.

The personification or dramatization of numbers is similarly motivated. I recall that as a child I refused to allow 7 (a crabbed old maid) or 3 (a disreputable vagabond) to appear in answers to arithmetical problems, quite to the detriment of my grades in number work. The embodiment of an attitude in a concrete symbol occurs frequently. This is true in the case of symbols for days of the week, for the seasons, and of nations, as witness our pictures of John Bull and Uncle Sam. Even Uncle Sam's increasing stoutness as he grows older is a symbolized expression of a nation's consciousness of its own changing attitude toward the planetary scheme.

Mental patterns involve still bigger organizations, a nexus of relationships, tags of meaning, shreds of imagery and of articulatory habits, all unified by a dominant attitude or emotion. Take the first feeling of a story plot. There is a sense of richness, of latent images, of rich possibilities of meaning about to discharge over the threshold. It is not surprising that in reducing this mass of possibilities to definitely conceived incidents, characters, and settings, we lose much that seemed so alluring in its inchoate form. A great deal of the molasses clings to the pitcher-spout in pouring it out. Professional writers acquire a technique for manipulating

their mental sets and during their uninspired moments make observations and gather material, write descriptions and catalogue names and phrases so to have ready fit garments for clothing their ideas.

It is, indeed, a delicate operation to snapshot the mind at work. I am fortunate in having in my possession a most interesting analysis by a very clever introspectionist, Professor Wilson O. Clough, of the University of Wyoming. I give this in full in the following chapter.

## CHAPTER XV

# AN INTROSPECTIVE SNAPSHOT

BY

WILSON O. CLOUGH

I TEND to reduce to writing as soon as convenient the rough draft of what I plan to work out, and to work on this tangible material. But I realize that the question is what I do *before* I write anything. I suspect that whatever my mind does with such a problem is done so sketchily, so fleetingly, as to defy definite analysis. Indeed, I wonder if successful work with larger thought groups does not necessitate that the mental process become practically unconscious and habitual. Even if it could be found that some individuals work through some definite schematic or visual or auditory image, it may be that an attempt to concentrate on that image-factor would retard rather than assist the total thought process.

At any rate, I wish to make clear at once that whatever imagery appears in my own analysis is in no way clear-cut, consistent, or even necessarily an element of my conscious thinking. I *can* seize upon such images and describe them in some detail, but that is because they develop as I examine them—as they would if I were assigned the problem of arousing such images and examining them. Normally, however, they appear, if at all, as exceedingly fleeting and vague ; and the examples given below are perilously close to analogies, instead of being verified mental experiences. Yet I have tried to analyse what does occur in my own mind, and to avoid the pitfalls of invention. With such cautions, I proceed with the introspection.

I suddenly conceive, let us say, of an idea for an essay, suggested by chance reading, reverie, or observation. How does my mind elaborate that bare suggestion into a plan for the essay—and how does it work toward the completed

product? Obviously, there must be some larger unit of thought than the word or phrase, something to hold the whole together as I develop its parts. As nearly as I can judge, I seize first upon some verbal clues, holding each as it comes while I grasp for others (sub-vocally ?), dismissing some, delaying judgment on others, subordinating some with a vague motor sense of putting them lower, and attaching to others an equally vague importance, as worthy of further examination. Yet with this search for verbal clues to my idea and its potentialities, there is often a vague sense of form or scheme. This latter " scheme " has no definite order of appearance or development that I can discover, yet it seems useful, however sketchy, for keeping the whole in mind. Sometimes it appears as vaguely elliptical, as though I could grasp it and mould it into shape. Yet I mould it not with the hands but with the mind, as though the mind had but to command and it took shape and form. But my mind is never on this shape *per se;* rather the shape dimly symbolizes the progress of my thinking, becoming less vague as I see or sense my idea working toward logical development. As I now seek to analyse this schematic phenomenon, it eludes me, taking various forms. Yet as I recognize (with that sense of familiarity said to be associated with memory images) various schematic aids to this thinking process, I seem to see in them a certain progressive order, and I shall list some of them in that order.

Individual ideas may seem to take on the most primitive nebulous-spherical form, especially at the beginning; a node, so to speak, without definite limits of size or shape, but melting vaguely into mists trailing away to indicate ramifications of the idea not yet pursued. Or is it—I can't say with certainty—a sort of verbal node, a primitive I AM, degenerating at all sides into the faintest nonsense sounds yet to be made meaningful. This is the schematic first step, describe it how you will.

As the idea develops, this nebulous form may seem to become several such forms, separate yet one, freely disintegrating or combining, all parts of a whole which envelops all vaguely, yet allows the parts to be examined separately. These are the subdivisions of the idea. Sometimes, by a sort of transition, this image becomes an arrangement suggestive

of the family-tree form, a main idea at the top (the subject of the paper), a number of ideas below, perhaps three to six or seven, and even further subdivisions. There is never anything below the third subdivision, except that a fragment of an idea may be dismissed to some vague area below to await its turn when the mind gets to the smaller points. The scheme is a step beyond the first and the idea is taking form and approaching logical order—also coming nearer a definite form which might be put on paper. That is, it is less nebulous.

Again, there may be a vaguely rectangular form before my mind's eye (three dimensional, with my mind only on the top surface), horizontally extended from left to right. This form, too, is nebulous at first, very flexible, with lighter or clearer portions which correspond to the development of my idea. I glance over these " high spots " from left to right, holding them in mind while I fill out my idea, and fill in the dim intervals between the clearer points. The intervals are not necessarily taken in order, for, as my eye roves over the whole, I may " see light " (metaphorically) or sense a change toward development in one part and seize on that before it is too late. Yet this whole form is very indefinite, and hardly clear enough to dwell on.

Again (not uncommon after I have actually verbalized my idea into a few phrases or words which are my main points), there is a certain sense of a manuscript, or of material on a vaguely defined sheet or surface before my mind's eye. This manuscript is usually all on one page, or surface (not as leaves in a book, though I can think of it that way)—on one surface because it can thus more easily be visualized as a whole. If the work is of any proportions, this manuscript is of necessity microscopic, to get it all before the mind's eye. On this manuscript, certain parts, such as the first words of sketchily defined paragraphs, stand out clearly, legible, yet not legible, after the manner of dreams of reading in which the printed matter refuses in the last analysis to develop into actual words. Yet in this schematic manuscript, the legible portions are in the form of fragmentary words or phrases, clues to the major ideas of the whole. The intervening portions are blurred with nothing to seize upon—yet. I say yet, because there is

a strange sense of being able to read this blur if I concentrate enough, as I seem to intend to do as I come to fill out my idea. I have a feeling that it can be deciphered—not invented or created, but deciphered. This whole form disappears entirely as I work toward an actual writing of my idea, and any sense of its use is no longer present. Yet as I think at this moment of completing this paper, there is a dim sense of the words to come as spread over the sheet below and the next sheet, with much the same manuscript sense of undecipherable blur which will evolve into printed (or typewritten) matter. One reason I prefer to write on the typewriter is that the form is more definite and precise, and, in a general way, easier to hold in mind.

Returning to the manuscript scheme, I may add that the fragmentary words or phrases are either visual or sub-vocal, and in either case mere pieces or outlines of words. They would be unintelligible if printed or spoken as they are, yet they are not nonsense syllables, but rather condensed or collapsed forms, as if I should write or say *ntelge* for unintelligible. It is as if I had a verbal or visual shorthand for rapid work, forms which can easily be translated into normal speech or writing, or easily developed into meaningful sound.

There are, perhaps, other border-line semi-schematic, semi-analogy forms. I cannot be sure of the reality of even those I have described. All I can assert is that there is a certain truth in what I have described, a certain approach to what seems to happen. The early forms, nebulous and vague, seem somehow primitive and vestiges of almost forgotten habits of thought. One might almost build up an evolutionary theory of thought from this feeling. The later forms, such as the manuscript scheme, seem more familiar, more mature, more easily analysed—yet more artificially developed, as if I had used them more recently. I have a feeling that the more primitive forms, and even all these schematic forms, have almost ceased to function, as though I went more directly to my task without their use, and yet that they lie underneath as the painful letter by letter reading of my first school days has given way to my present rapid course over the page. Yet the struggle to express oneself is too difficult to be explained

away without some mention of the struggle to make a dimly conceived idea burst into the light of the right word. Be it word, sentence, or whole essay product, there is something like nebulous void taking form, a growth, from gestation to verbalized completion. Sometimes one seems to watch the process objectively, again to struggle with it subjectively. The final product may surprise by its outcome. I have had a story end itself in an unexpected way, as though I had started something that grew of its own accord. There seem to be at the conclusion, elements which are more to be found, to be discovered, than to be created or invented. One seems to need an observant, examining eye for what *appears*, a critical judgment as to its use, a mind to will its development and appearance—and yet not exactly a mind to create it from itself. It is as though the mind were receptive rather than creative, and then were critical of what it receives.

How depressing to see the nebulosity of the first vague conception still on the page, where words, words but reveal the failure rather than conceal it. Nothing I write seems ever rid of it except in rare flashes. Little that others write seems free from nebulosity. Style, I think, may be defined as the satisfaction from the clear idea, no longer veiled in the mists of a first hazy conception.

## CHAPTER XVI

## RHYTHMS

RHYTHM is one of those basal experiences with which even the little child has intimate acquaintance, but the secret of which the most profound scientist has difficulty in penetrating. There have been almost as many theories concerning the ultimate explanation of it as there have been theorists on the subject. That the experience of rhythm is very deeply rooted in the physiological life would be conceded by all. But it is another matter determining the particular mode of functioning of the nervous system that issues in the awareness of rhythm. Fortunately it is not necessary for our purpose to plunge into a theoretical discussion of the topic since our interest is mainly a descriptive one.[1]

In the rhythmic experience a succession of similar impressions is broken up into a series of equivalent time-units, through varying stress objectively or subjectively initiated. Attention is a pulsing or wave-like process and its fluctuations may serve to transform any uniform series of impressions into a rhythmic pattern. Variations in organic stress may function similarly. We may cite as examples of subjective rhythm the *tick-tock, tick-tock,* of the evenly vibrating clock or the patterned beating of the mechanically monotonous metronome. Rhythmic organization is more easily assumed by auditory and motor sensations because of their flowing quality, but visual rhythms also occur when there is recurrence of given impressions in a serial presentation.

Comparatively simple rhythmic patterns subjectively initiated may be indefinitely complicated by the organization of patterns on an objective basis. Any method of breaking up a succession of not too different impressions into time-units may be used but the most common one is to introduce

[1] See I. A. Richards, *Loc. cit.,* Chapter XVII for a stimulating discussion of Rhythm and Metre.

regular variations in intensity of stimulus. This is the device used in English verse where the time pattern is measured by so many accents per line or per stanza. Other ways of maintaining verse-rhythm are possible as, for example, the classic procedure in verse-making of stressing by prolongation of a vowel-sound rather than by accenting it. Keen sensitiveness to time-relationships is undoubtedly fundamental in ready initiation of rhythm and if the individual possess this, poet or musician may play almost at will with the qualities that set his measures for him such as accent or duration of tones. If organic or motor stresses are exceedingly strong the reader may on occasion find his own rhythmic set so out of harmony with that initiated by poet or musician that only a particularly strong stressing of beats can get him in the proper pattern. Musicians and poets understand this and in their first measures permit themselves less liberties than they take afterward when they have confidence that the listener's subjective rhythm is set to enforce the objective one.

Rhythm may be accentuated by rime-schemes, the recurrence of similar sounds at given intervals, like bells chiming the hour. There is a tendency in reading to pause on a rime—a pause which underscores, as it were, the metrical movement, and so permits it to echo its way into the reader's memory. Rimes are "like mile-stones marking off uniform divisions along the word-highway," but too great uniformity is deadening and skilful handling of the pause imperative. The more auditory the reader the more chance that he may find rimes too insistent to be pleasant, particularly if synchronized with the natural pauses.

Most of the literary quarrels with respect to rhythm are due to the complications of subjective and objective rhythms and the degree to which motor patterns need to be enforced by auditory ones, or riming lines. A subjective rhythm of one's own sometimes makes it impossible to catch another's subjective rhythm that is only delicately etched on a verse, a remark that may serve to introduce the subject of *vers libre* which depends so greatly upon individual rhythms. To ask whether *vers libre* can rightly be called poetry and to appeal in answer to some ready-made definition of poetry that includes in the term itself an implication of a particular pattern, namely, a metrical

one, is not enlightening. To seek to determine what individual differences operate so as to produce different capacities to enjoy wide-range rhythmic effects would be most profitable. In any case, impressing upon a reader a delicately modulated rhythm largely subjective in nature is a more difficult matter than adopting the conventional means of stressing rhythm objectively by regular accents and recurrent sounds. Various factors need to be considered in estimating which method is the more valuable in a given situation.

The configurationist's treatment of rhythm suggests possibilities of the same sort of laboratory investigation as that initiated by them in the field of perception and of productive thinking. Since the configurationist finds the real psychic unit in a pattern or whole rather than in isolated elements, it considers the iambus or trochee or anapæst as existing prior to the separate beats or stresses rather than built up from the latter. Modern poets handle their rhythms quite in accordance with configurational theory; even the metrical foot is moulded by a larger rhythmic pattern. The hard mechanical scansion of earlier days has gone by the boards.

In analysing the differences between cadenced verse and rhythmical prose one should not fail to note three characteristics of the former: its visual form; its accentuation of the pause by means of the short line; and its utilization of a recurrent thought or mood-effect.

Says a strongly visual reader: "I recognize poetry by its appearance, not by its sound, its rimes or rhythms." And she adds that she can read a half column of metrical and rimed verse and not recognize that it is verse if it be printed as ordinary prose. Many people could report similar experiences. Others when they chance upon "verse" printed in prose-fashion may read on for many lines with a queer feeling that something's on foot, they don't know just what. Even the strongly auditory individual may fail to catch immediately the measure of the line without the visual signal. Actually, the printing of material in the conventional visual form of verse calls up, through long associative connections, rhythmic and poetic mental sets, which may enhance imaginative phrasing, or if used in sportive fashion as in "free verse

advertisements " produce a fusion of incongruous attitudes that is comic in effect.

There is another point of view from which different visual stanza forms might be investigated ; their effectiveness merely as visual stimuli. Most persons who have experimented with verse-writing know that it is possible to get curiously different nuances from the same poem by the way in which lines are broken up and indented. As an illustration one may cite Gray's manuscript copy, in the British Museum, of his famous " Elegy," wherein the lines following one another with no break give a very different effect from that obtained by the usual printing of the poem in stanzas of four lines each. Varying effects produced by various stanza forms are due, in part, to variation in the introduction of pauses ; in part, to the sheer visual appearance of the printed form. Even pictures may have a definite rhythm ; be written in march-time or in waltz-time. Sensitive individuals are often able to identify the precise musical strain that a picture-rhythm gives them. Natural scenery also produces rhythmic effects. Often, of course, the actual auditory and motor material aroused by blowing trees and rippling streams or billowing surf gives this rhythm but it may arise from silent scenes, from the long quiet line of spacious prairies or the short broken one of foothills.

The accentuation of the pause in cadenced verse by the use of short lines or isolated words helps to initiate a subjective rhythm, or to enforce the poet's own. Marguerite Wilkinson suggests that the pause also gives time for the development of latent imagery, a fruitful suggestion.

In any case we need to recognize the existence of pseudo-rhythms growing out of symmetry of design, emotional parallelism, the delicate balancing of moods as well as of phrases. There is such a subtle patterning of thought and feeling that mood-overtones, and sometimes auditory ones, are evoked so as to introduce harmony, as well as melody, into verbal music.

The following poem may, perhaps, serve as an example of pseudo-rhythm. In the two parts of the poem there is the same emotional sequence although set in very different keys ;

there is slight verbal patterning; and little rhythmic regularity :—

INVISIBILITY

I

Black Butterfly, ebon-etched
On the gold foam
Of the breezes of the sun ;
Sable blossom of midnight
When crazed fingers
Tear at Time's curtain
And you escaped,

Is this the secret of Madness,
Death in the sun ?
Black blossom of hell,
Gone ! Swept by gold breezes
Into gold invisibility.

II

White Butterfly, radiant dazzle
Of wings, drifting
To the silver radiance
Of clouds at world's end,
Who shall tell
Butterfly from cloud
In the distance,—

Is this the secret of Blindness,
Light broidering light ?
Radiant one, You,
Lost in the dazzle,
Are you yourself still ?

A poem is, in many ways, the finest possible example of a psychic pattern in which the *ensemble* determines each detail; it is no mere sum of its parts but as unique a totality as a melody. The more cunningly the design is etched upon each minutest detail, the more perfect the poem, and probably the greater its survival value. The suggestion that one can test the worth of one's own poetry by its " mnemonic quality " is a recognition of the configurational aspect of a poem, since to the degree that experience is crystallized is it remembered. Moreover, in the making of a poem every poet has experienced the mysterious tyranny of a cosmos " a-borning." Often a ghostly rhythm enchants words from the " deep well of the unconscious " or invention is fertilized by the potency of a rift in the design which demands closure.

Literary critics have two things to say concerning the relation of rhythm and emotion. Sometimes they emphasize the statement that the natural expression of the emotions is a rhythmical one; at other times, remark that rhythmic expression itself induces emotion. Both statements are true. In all emotional states there is an heightening of organic stresses which would in itself impress a rhythm. Most of us know at first hand how we may get a rhythmic set from a strongly beating heart and how our mental *tempo* is determined very often by the rapidity of the pulse.

But rhythms originating from outside the body may imitate the organic ones and so take on emotional coloration. The therapeutic value of both music and poetry is in part to be explained by their initiation of soothing organic rhythms. As for myself a slow regular rhythm induced by listening to dove-grey music may gradually retard the organic *tempo* set by a very rapid pulse.

Rhythm is one of the hypnotic devices of poetry; prolonged and accentuated it may in time produce a fatiguing of the attention, lull emotion, and cause a mental relaxation, the character of which I shall discuss in a later chapter.

## CHAPTER XVII

# THE LOGIC OF THE EMOTIONS

STATISTICS sometimes tell strange tales. For example, Dr Anita M. Mühl, analysing, as a psychiatrist, America's suicide problem,[1] has ventured some curious conjectures as to why San Diego, the beautiful city of the perfect climate has the greatest suicide rate in the United States, twice as high as that of New York with all the terrific pressure it brings to bear upon its inhabitants. It is, Dr Mühl asserts, not chance that this should be so, nor is it to be attributed to the stranger in the city's midst. She writes, " It must be obvious that this jumping-off place of the United States holds a death-lure for individuals with regressive tendencies who have found it impossible to adjust themselves at one level or another." Her explanation of this death-lure is in terms of the symbolism of the West Coast and of the Sunset. " Since earliest times the Sunset has stood as the symbol of death and the West typifying the land of the sunset is another expression of the same thing." Dr Mühl claims that actual analyses of persons who have attempted self-destruction confirm the belief that the Sunset is a death symbol.

One feels that the whole story has not been told for the West has symbolic possibilities other than those cited above, but the attempt to psychoanalyse the poetry of places is novel and suggests fascinating possibilities in the way of discovery of the secret spells cast by glamorous cities or dark continents.

In a world that the pressure of existence has made unduly objective-minded and utilitarian in temper, certain subtleties of the emotional life[2] have long escaped that contemplative

[1] " America's Greatest Suicide Problem," *Psychoanal. Rev.*, Vol. 14, 1927.

[2] " It is exceedingly difficult to bring the æsthetic and the scientific treatment of emotion into any connection whatsoever. The author, however, has faith that experimental methods when extended to

treatment so necessary to satisfactory understanding of them. The logic of things and of the relations of things has developed rigidly, becoming continuously more and more mathematical and precisely prophetic, but the swervings of the emotions have been side-tracked by science, often under uncomplimentary names, such as, biases, fallacies and the like. That the mental processes labelled thus uncompromisingly deserve better treatment at the hand of science has become evident and logic itself has become preoccupied with the emotional life and its curious ramifications. There are psychologists who proclaim the existence even of a logic of the emotions, of emotional constructions that follow the old lines of abstraction and generalization laid down by the writers on orthodox logic but which issue in determined lines of passion and of emotional conclusions.

It is with the milder forms of the emotions, sometimes called pseudo-emotions, that we are primarily concerned in literature. Complexes of feeling toned by varied organic fusions; expansions and prolongations of emotions in mood-overtones; distillations of sentiments, which have been defined as organized systems of emotional dispositions centreing about the idea of some object; shunting of an emotional tone from one situation to another; these constitute, in part, the material of literature. It has been suggested in a previous chapter that the mechanism of the conditioned response may be invoked in explanation of such playing with the emotional life by poet, novelist, and dramatist. To repeat, at present one can do no more than state the principle in general terms; details evade us and will continue to evade us until experimental technique acquires greater facility in handling delicate situations.

The conditioning of responses through the association of

emotional situations other than the cruder ones now exploited may explain many subtleties of the æsthetic reaction. Particularly promising are investigations on conditioned emotional reactions. On broad lines it has become apparent how organic sensations and visceral tensions may come to colour almost any mental state whatever.

That even delicate reactions may some day be handled experimentally may be anticipated in the light of such recent work as that on the psycho-galvanic reflex. That the curious emotional reactions of psychopathic patients deserve scientific analysis has long been acknowledged; that responses to art furnish another field for exploration has only recently been recognized.

stimuli leads to curious ramifications in consciousness of organic sensations and visceral tensions, accompanied by affective spread or transfer. An emotional tone may be diffused over all the elements of a situation and details that were originally indifferent become " affectively loaded." This is a common experience of the sentimentalist who finds faded flowers, scraps of paper, and tombstones saturated with emotion. That some individuals are more subject to affective spread than others is a commonplace among psychopathologists. Whole realms of activity may become emotionally " tabu " because of an unpleasant consequence of an act. One's first experience with a telephone if it involved news of a death might give an unpleasant toning to the sound of all jangling bells. Frequently a person who brings bad news becomes associated with the news in such a way that he takes upon himself as a stimulus some of the diffused emotion. Moreover, there is relative detachment of feelings from their natural objects since there is a disposition to shut out of consciousness the objects which aroused them and they become " free floating affects " ready to attach themselves to stray percepts or ideas. In such a way symbols come into being. The *motif* of many a lyric would, indeed, seem to be a disembodied emotion that, lingering on the outskirts of consciousness, suddenly materializes itself in a flower seen by chance or in a stray perfume or song which then serves as a medium for communication, a symbol of a subtle meaning.

Freud has shown that the trivial incidents of the day preceding a dream play a predominant part in the manifest dream-content because they have had no chance to become deeply woven into the associative tissue of the personal life ; so, too, poetic symbols other than those which have become conventionalized are often in themselves trivial or bizarre, qualities which fit them for the assumption of connotative functions. The point of crystallization for a poetic emotion is often in itself as insignificant as Wordsworth's daisy or Blake's little fly ; but the wandering and homeless emotion more readily enters the empty chamber. The vague surge of passion or desire suddenly transfixes a leafless tree or a ragged nest and finds there an habitation and a name. Rossetti's

poem " The Woodspurge " shows us such poetic symbolism in the making :—

> " My eyes, wide open, had the run
> Of some ten weeds to fix upon :
> Among those few, out of the sun,
> The woodspurge flowered, three cups in one."

Certain dream symbols appear to have a more or less universal significance although it somewhat puzzles the uninitiated to understand how a symbol can acquire meaning except through emotional conditioning by each individual. Much poetic symbolism is obviously the outgrowth of merely subjective experience on the part of the poet. A stereotyped symbol may be used again and again, thus Blake's symbol of the Lamb which recurs so constantly in his poems, and his image of the Tree which perhaps suggests the tree of good and evil. The poet may employ these symbols as simply and spontaneously as a child, or he may adopt with deliberation the symbolic language of a legendary cycle. Perhaps he chooses the Arthurian legends or the Norse myths, or those of classic mythology or of Irish folk-lore as carrier of his meaning. The difference between a spontaneous and a sophisticated use of material is clearly enough evidenced by a comparison of Blake's poetry with that of Yeats'.

Can memory, it has been asked, reinstate an emotion as emotion, apart from the situation that in the first instance furnished it an excuse for being ? Can one recall the passion of anger or of love with no recall of an object of the passion ? Are there evanescent returns of emotion, echoes in consciousness of emotional experience wherein the cognitive element that gave the experience body has passed away leaving behind as the soul of the experience a tender exhalation, a spiritual fragrance, detached, disembodied ? Practically it would seem that such is the case although one cannot affirm the loss of all sensory content. It may be that organic or kinæsthetic content is essential to emotional memory.

One may not be able to recall voluntarily all the tremors of the emotional life ; to feel, at will, fear and grief, gaiety and exhilaration ; yet one's power of recognizing a likeness to an old emotional experience in a new one differently conditioned testifies to the relative detachment of the emotional

factor. The shiver of the spirit with which one contemplates an old bearded pine on the windy side of a barren hill is akin to that which shakes one's heart at seeing some ancient Lear driven from the home where love abides not. The motherliness of outline of trees against the windy skies of March awakens a familiar warmth of feeling.

Every sensitive mind can testify to the presence in his life of subtle overtones, of feelings that play fitfully about the events of the day and at its close furnish him his only epitome of the experience. No remembered image of the spring night has been garnered, only a mood of delicious restlessness, of vague aspiration.

But the existence of emotional memory and of emotional abstracts does not exhaust the possibilities of the emotional constructions of experience. The emotional abstract once made, a peculiar toning isolated and recognized, may fuse with other abstracts as do rational abstracts. Emotion and emotion may flow together and constitute a conceptual experience which may subsume under itself other emotional experiences and thus systematize the emotional life of the individual as his intellectual life is systematized by the maxims of geometry or of physics that he accepts as axiomatic. The emotional concept is the arbiter of destiny! War—the breathless heroism, the glorious sacrifice of self for wife and child and country! War—the despoiler of homes, the ravager of women, the brutalizer of men! Whichever feeling-tone colours the word determines our actions. Cults and creeds are only words dipped in the emotional life and rendered invulnerable and sacred through the accumulation of sentiment, hence the truth of the apparently paradoxical statement that words use Men rather than Men, words. The satirist has shown how even plain newspaper editors borrow prestige from words when they name themselves, The World, The Sun, The Voice of the People. Always, thereafter, the Editor speaks with authority in the column sacred to him although outside of it he be a very commonplace gentleman indeed.

The organization of inchoate feeling into mood-complexes is characteristic of the artistic temperament. There are all degrees of comprehensiveness of synthesis from the elaborate mood-organization of " The Tempest " with its rich overtones

and choral harmonies to the simple melodic pattern of Rossetti's " Blessed Damozel " or the lovely mood-values of a rainy day or a winter sunrise. These emotional attitudes constitute a rich material for literary creation and appreciation. The dawn-feeling, the moods of dusk, of hill-tops, and of autumn rain, the exquisitely differentiated moods of the season, are melodic organizations of the emotional life.

How haunting the moods of places! The merest hint wafts us

> " To the glory that was Greece,
> And the grandeur that was Rome."

A catalogue of proper names may serve as a geography of the spirit. Ravenna, Venice, Capri, Avignon, Cairo, Karnak—how inevitably the spell works!

In the atmosphere story we find the most delicate exploitation of the mood-complex. A false word, a nuance off-tone, and the cloud palace is dissolved as by the waving of the wand of a tricksy spirit. All connotation is the outcome of emotional synthesis, and, as we shall see, figures of speech are largely so motivated. Always, for purposes of communication, the mood construction must be given an habitation and a name, hence, the imaginal texture of most literature.

We have already discussed irradiation of emotion but one further use of it must be stressed. Novelist and poet use this principle for contrast effects. They set a dominant emotional tone that prevails and introduce with this as a background other emotions that intensify the primary tone. The more skilfully the artist can play passion against passion and yet maintain emotional unity the richer his art. The shunting of emotion from one situation to another is the secret of the poet's magic sleight-of-hand. Often the mood of a title colours a whole production. Under another title and setting the sordid incidents used by O'Neill in his play " The Moon of the Caribbees " would impress us as ugly prose rather than as subtle poetry. Tennyson has manipulated " affective spread " most skilfully in his " Lotus Eaters," the first part of which initiates a mood of complete relaxation, of drowsy acquiescence, a mood which carries over and accentuates the bitter denunciation of the indifferent Gods in the latter part of the poem.

Carl Sandburg handles emotional contrast by almost brutal

juxtaposition of differently keyed situations. In " Limited," over the laughter of the riders on the crack-train floats realization of tragic futility, the nothingness that is the ultimate goal of all travellers. In " A Fence," dwellers on the Lake Front make a cruel masterpiece of iron bars and steel points over and through which nothing will go " except Death and the Rain and To-morrow."

Emotional irradiation explains, in part, the extraordinary effectiveness of Strindberg's " Dream Play," in which he has succeeded in fusing dreamlikeness of atmosphere with a brutality of detail that gives a sense of creative fusion, of cosmic mystery, of spiritual reality.

## CHAPTER XVIII

## THE METAPHORICAL CONSCIOUSNESS[1]

One of the greatest charms of style is its employment of figurative language, its use of apt comparisons. The delight in parable and allegory, in fable and metaphor, characterizes the modern as well as the primitive mind. From the psychological side we have the substitution of one image or meaning or situation for another. Sometimes an implicit substitution runs through a story and we have an allegory as in "Pilgrim's Progress"; sometimes a deliberate comparison is initiated as by Matthew Arnold in "Sohrab and Rustum" when, for example, the young prince is likened to a cypress that grew in the queen's garden, tall and dark and straight. Sometimes the substitution is a swift and unexpected identification of two objects of thought as in a descriptive bit of an automobile ride at midnight which runs: "The car purred with the contentment of a great house-cat and lapped up the shimmering road like a stream of milk."

Rhetoricians have long rejoiced in minute study and classification of figures of speech—a process that seems productive of little else than weariness of flesh and vexation of spirit. Recently it has been realized that from the psychological point of view a study of such figures is most promising. Here lies a rich field waiting cultivation. In the comparison we find ideas in the making, we snapshot mind engaged in its curious labour of substitution and identification, in its effort at emotional articulation and emphasis.

There are two ways in which one may approach a study of figures of speech. One may investigate the general motivation of the process or one may enter into detailed analysis of

[1] This chapter appeared, except for minor changes, under the title "The Psychology of Figures of Speech" in the *Amer. J. of Psychol.*, 30 (1919), pp. 103-115. Reproduced by permission of Editor.

the various mental processes involved and determine the variety and extent of the figure-making consciousness.

In general pattern, the figurative consciousness recalls the substitutions that occur in dreams and in hallucinations. Much that we read of dream-symbolism could be applied to poetic symbolism. Dream-symbolism, as investigations have shown, is a translation of content elaborated outside of consciousness—perhaps in the deeps of the unconscious—and emerging so transformed that the original is not always evident. The underlying motives are intimately related to deep-seated impulses of the given personality.

The substitution occurring in dreams is often cryptic in nature. The underlying meaning can at times be penetrated only after the most far-reaching analysis, an analysis of the intimate life of the dreamer. Literary or poetic symbolism must be more obvious in nature else the poet's songs would be sung for his ear alone. Yet, too, the allegories, the metaphors in which he delights must, for the most part, well spontaneously from his spirit and he must trust to their appealing to those among his readers whose life of instinct and emotion is similar to his own. This basal similarity in the instinctive and temperamental life constitutes native rapport.

Substitution of one mental object for another is then basal to the figurative consciousness. Before we proceed to discuss the details and varieties of this process, let us ask *why* the mind indulges in substitution.

Freud finds the motivation of dream-distortion in an attempt at psychical disguise. The mind receives gratification of censured desires by masking them. Prince[1] insists that literary symbolism must, in general, be created by conscious selection of associations, since the writer can recall rejected material. No doubt, however, instances occur of literary constructions constituted quite in the dream-fashion, and quite likely expressive of the latent wish. Usually, the determining motive is the desire for novel expression, particularly of emotions and subtle conceptions.

In a technical study of the subject, we would need at this point to question in some detail the operations of associative activity. Two remarks only may be ventured. (1) In the

[1] *The Unconscious*, footnote, p. 202.

work of mental construction the most delicate of relationships may serve the purposes of transition from one idea to another, and through divergent associations the most unexpected and original of constructions may arise, with condensation—voluntary or involuntary—carried out to the last degree. The greater the condensation the more intense and poetic the identification or metaphor which results. (2) In emotional excitement the associative range may be greatly extended, with chance for the most bizarre and subtle of combinations, regulated by emotional congruity alone.

As an example of substitution in general let me quote certain of my notes on dream-substitution :—

> " It is night on a B. and O. Pullman. The road-bed is very rough. I awake suddenly from a dream of a great black shaggy Newfoundland dog which is lying under my bed, shaking it with his restless heaving from side to side, and growling hoarsely meanwhile. Waking, I realize that the thrashing and growling of the dog fuse perfectly with the roll and rumble of the train. Moreover, on next seeing a locomotive, I notice what an excellent substitute for it the shaggy dog was."

A second example instances a more subtle substitution :—

> " I am sleeping in a San Francisco hotel on a noisy street corner. Opposite the hotel is a garage and, along the street, a car-line, with cars passing at intervals.
>
> " I dream of a host of soldiers marching past the hotel ; that is, in my dream I hear the trampling of many feet—not, however, the even beat of trained regiments on the march. I wonder at the ragged uneven quality of the noise and in my dream I go to the window and look out. I see hosts of men and boys marching down the street, dressed in all manners, many of them in rags and tatters, others in uniform but carrying weapons of every description. ' Oh, they're raw recruits,' I say, in explanation of their uneven irregular tramping."

In this example the ragged line of men and boys, with the motley of garment and weapon, is an excellent substitute for the ragged irregular street noises, with which it appears to fuse perfectly.

The next example is a substitution in a waking state, the motivation of which is literary :—

> " I am out in the dusk of a California night. Around me on bushes, and above, drooping in great garlands from the roofs of the houses, is a profusion of white roses. Suddenly, I am arrested by their luminosity. As the dark dims the outlines of all the world beside they grow an intenser white ; they gleam

phosphorescent in the dusk. They create a poetic mood, those white roses—I am restless with longing to express their loveliness. The saturation of sense and spirit would crystallize. How? In a figure? A poem? Suddenly the mood of the moment identifies itself with the mood that belongs to my feeling for ghosts, for wraiths, lovely and homeless wanderers. They are no longer roses—those gleaming white flowers—they are phantoms of desire, ghosts of all things lovely that were and are not, ghosts of unrealized dreams. And now the mood of the stars blends with the mood of roses; the dusk deepens; the roses float detached. They move starward."

Let us pause a moment to note some differences between this substitution and that of the dreams quoted. In the first dream, given auditory and motor sensations adopt for themselves an explanation other than that of the real object. The whole movement of consciousness is definitely related to that involved in the constitution of an illusion. The *actually felt* roll and the *actually heard* growl are interpreted as due to a dog under my bed rather than to the movement and noise of the train—a simple illusion. On waking, the fusion of Newfoundland-dog-consciousness and the boisterous-train-consciousness is found pleasing, satisfactory. In the second dream, ragged noises transform themselves into an image of soldiers in motley array. The substitution seems highly appropriate to the waking consciousness. The shift in the image has definitely enriched the meaning.

In the substitution of phantoms for roses we have a somewhat different condition. Here there is no fusion of sensations; the roses are not perceived as phantoms. There is no shift in imagery. The mood-background is the common element.

It happened, however, because of my interest in figures of speech, that I was not content with a fusion of moods. I wondered if possibly the white roses might actually shift into something else at the perceptual level. With this end in view I deliberately dwelt upon the mood-complex many times, visualizing the roses in the dusk. And once a spontaneous substitution occurred. Suddenly the night, dimly seen as a swarthy and voluptuous queen, was wreathed in the loveliest of milk pearls. Curiously enough, the substitution, while satisfactory as a substitution and quite in line with dream-substitutions, was not in harmony with the mood-tone of wraiths and dim desires. This substitution was sensuous, rich; not spiritual nor shot with faint starlight.

From these examples we see how complex a matter the substitution-consciousness may be. To bring out further details with reference to it, I may summarize certain experiments upon it. At times, I requested my subjects to read silently poetic fragments, chosen because of their figurative language, and to report their reactions; at other times, I read the fragments aloud to them and transcribed their oral reports.

Several reasons for variation in report are noticeable. In the first place, explicit substitution of one mental content for another occurs much more frequently for some reagents than for others. And even when the substitution takes place variations are noticeable as to the degree with which the two contents fuse, or coalesce, into one rich meaning. Substitution may be merely mechanical and result in incongruous, even brutal, juxtaposition of mental objects, or it may be a subtle psychical reaction whereby new meanings are created, old meanings illuminated, shot through with the magic light of poesy. Obviously, readers of the literary temperament will stand out against those of a more matter-of-fact mental type. The reactions of both are of great interest.

In the second place, it is very difficult to watch the play of the mind in a subtle and evasive act. Investigators of the figurative consciousness realize the need of utilizing trained subjects who are used to catching psychical butterflies on the wing. Even so, the experimental attitude rubs the bloom off æsthetic experiences. A purely analytical attitude may defeat the end one has in view. Moreover, the figure often gains its force from the context in which it is set. Fragmentary presentation is bad. Not only the reader and the method of eliciting the report introduce variation in response but also the nature of the figure chosen is influential. The psychical reaction to the simile is very different from that to a metaphor, or to a personification. The hyperbole reaction has a psychic coloration all its own.

Let us list the questions we had in mind in carrying out the experiment on similes and the answers given by previous investigators:—

(1) In what psychical terms are the two portions of the comparison apprehended? Have we, for example, an imaginal

representation for both the main and the accessory portion of the metaphor or for one part only? If the latter be true, which part of the comparison gives the image? Will the reactions of a number of subjects be consistent in respect to this point?

(2) If both parts of the comparison be represented, what relation holds between the parts? Is there merely a displacement of one content by another? A displacement so final that there is an actual conflict, or change in meaning? Does the image of the literal portion of the simile melt into that of the figurative so that a complete fusion, a coalescence results?

(3) In what relation does the double mental content stand to the complex out of which the two thoughts come? What constitutes the background that lies above and around and below the specific meaning? Or may the two meanings fail to have a common background?

(4) Does the point of comparison come to consciousness?

On general grounds it has been conjectured that too minute, too precise imaginal accompaniment to figurative expression would often be embarrassing. Sensuous translation of a figure may emphasize the difference between the objects compared and thus destroy the unity of comprehension necessary for artistic appreciation of the figure. This conjecture is supported by reports on the imaginal reaction to poetry from which it appears that readers with a habit of concrete visualization find many similes and metaphors distinctly grotesque. Even such a simple departure from the literal as in Galsworthy's line :—

> " Wind, wind, heather Gipsy
> Whistling in my tree "

is found unpleasant by the visual reader who resorts to concrete picturing of a gipsy. But the word " gipsy " as a carrier of a delicate emotional and attitudinal reaction results in delightful appreciation of the poet's meaning.

An attempt to determine in some detail individual differences in the reaction to the simile has been reported by Karl Groos.[1] Groos cites Plüss's criticism [2] of the imaginal theory

[1] " Das Anschauliche Vorstellen beim poetische Gleichnis," *Zsch. f. Aesth.*, Vol. 9 (1914), pp. 186-204.

[2] " Das Gleichnis in Erzahlen der Dichtung." Verein deutscher Philologen u. Schulmänner im Basel, 1907.

of the simile and Plüss's conclusion that the value and purpose of a poetic comparison are not to be found in the arousal of a visual image but in the creation of a "*Gesamtvorstellung*" common to both the principal and subordinate object.

Groos, in turn, calls attention to individual differences in reaction and the probability that imaginal comprehension may be potent, at least for certain readers. But the imaginal form need not be visual in every case; tactual, auditory, kinæsthetic material must also be recognized. The conscious attitude which is the common carrier or background for both the main and the metaphorical presentation may, moreover, be intellectually coloured for some readers; emotionally coloured for others. The conceptual and thought side of the metaphorical consciousness must be emphasized as well as the sensuous aspect.

Specifically, from the reports of his subjects, Groos found five different possibilities that might arise in the imaginal comprehension of a poetic comparison: (1) the imaginal experience chiefly concerned with the main object; (2) the imaginal content largely concerned with the figurative portion of the comparison; (3) an image for the principal object only; (4) an image for only the accessory object; (5) equally intense imaginal representation for both parts of the comparison. Most interestingly, however, Groos' tabulation shows an amazing preponderance of imagery for the accessory or figurative part. Of his eighty-two cases of imaginal representation only one is that of imagery of the main object alone; in the other eighty-one reports there is evidence of representation of the accessory object in some form or other.

Cases are cited where in the imaginal representation of the figurative portion substitutions occur or details are added in such a way as to disturb the value of the figure or to cause a concentration on the figure for its own sake. Possibly the background of the accessory image may differ in mood-tone from that required by the main element. The mind may, however, indulge in detours and irrelevancies without loss of æsthetic enjoyment. Groos found that most of the reports of visual imagery were of clear and individual images.

The presence of imaginal representation for both parts of the figure was found in certain reports to diminish the æsthetic

unity; the oscillation of the images destroyed the feeling. In other cases this double representation was pleasing. It is impossible to determine from the material at hand under what conditions this latter effect resulted. Possibly, faint imagery was conducive to pleasantness; the visual images because of their weak determination might flow together into a "*Gesamteindruck*," [1] or total impression; "a shadowy something floated up." A mingling, a melting together of two vague images into one, enhances the æsthetic pleasure.

Let us take an analogy from the photoplay. The pictures of certain reagents replace one another as crudely as did those of the cinematograph of earlier years. One can almost hear the whir of the machinery. For others, the successive pictures dissolve, melt into one another, with the exquisite modulations of the artistic photoplay of to-day.

It is to various degrees of the blending of object and image that Sterzinger has recourse in explanation of the æsthetic value of different metaphorical presentations. His investigation of the various factors contributing to the substitution-consciousness is probably the most thorough-going treatment at hand. He instances various forms that substitution may take, namely, oscillation, simultaneity, and melting together of two images. The process is complete when a new construction comes into existence. The object is no longer seen as such but as a second; there is a union of psychic elements giving a product with new qualities.

Substitution, or a displacement of one image by another may, of course, take place in regions other than the visual. As a peculiar instance of such substitution Sterzinger classes metaphors in which images from different sense-provinces fuse (melt) together. The basal presentation, for example, and the image of comparison may belong to different departments of sense. Such metaphors, which are synæsthetic in origin, we have already discussed in another connection. They furnish, however, a most valuable material for exploitation of the figurative consciousness, and are increasingly frequent in the new literature.

Let us turn now to our own experimental results. In

[1] "Die Gründe des Gefallens u. Missgefallens am poetischen Bilder," *Arch. f. ges. Psychol.*, Vol. 29 (1913), pp. 16-91.

many respects the reports are much like those collected by Groos. There is, however, no case of excessive preponderance of imagery for the metaphorical part of the figure, a result which doubtless was largely determined by the nature of the two similes utilized in Groos' experiment.

Let us take first the Homeric simile of Arnold's to which we referred above :—

> " For very young he seem'd, tenderly rear'd ;
> Like some young cypress, tall, and dark, and straight,
> Which in a queen's secluded garden throws
> Its slight dark shadow on the moonlit turf
> By midnight, to a bubbling fountain's sound—
> So slender Sohrab seem'd so softly rear'd."

Here the comparison is made with utmost explicitness. On the one hand there is the prince ; on the other, the cypress to which the prince is likened. What do our reagents do with the figure ? This simile is one that lends itself so readily to imaginal representation that rich imagery—visual and auditory—is reported. The majority of the reagents visualize both the prince and the cypress but in varied relation. Both may appear in the garden side by side ; there may occur an oscillation, the prince vanishes as the cypress appears ; a few report a blending of images. The image of the prince melts into that of the dark cypress. For almost all reagents the garden background is present in full richness ; there is the sound of a fountain and the midnight mood.

Or take this charming bit from Shelley :—

> " The plumèd insects swift and free,
> Like golden boats on a sunny sea."

One conjectures that for the poet writing the lines the insects (not too precisely determined entomologically !) are winging their gladsome flight through the summer air. Suddenly, there is an intensification of the golden sunshine and of the blithesome rocking of the insects and lo ! they are insects no longer but golden boats on a sunny sea.

What now does the appreciative reader do with this simile ? Let us first emulate the statisticians and cite a few figures. Of twenty-six readers sixteen image both parts of the simile ; five image the first part only, and three image the second part alone ; one reader is so obsessed by the music of

the words that he is occupied by this melody to the exclusion of all else.

Certain comments are instructive. A few readers are intellectually disturbed by the word " pluméd," the appropriateness of which they question. Eight readers report a break in connection between the two parts of the figures; the boat-image, although pleasant, is irrelevant.

Others give a complete replacement of one mental object by another. The insects vanish and golden boats appear on a realistic lake. Perhaps no point to the comparison is realized. The only persistent content is the thought or feeling or sensuous image of a summer day. But there are reagents for whom the point of comparison mirrors itself in consciousness very definitely in the intensification of the golden colour in insect or boat or air, or in the deepened sensation of the swinging movement. For such readers the consciousness of insect and boat may fuse perfectly.

One of the interesting mechanisms of dream-fabrication is that of compression, a packing of an image with meaning; its so-called over-determination. In poetry such packing of the image is evident to the highest degree; there is multiplicity of meaning, as in Thompson's opening verses of " The Poppy " :—

> " Summer set lip to earth's bosom bare,
> And left the flush'd print in a poppy there;
> Like a yawn of fire from the grass it came,
> And the fanning wind puff'd it to flapping flame.
>
> With burnt mouth red like a lion's it drank
> The blood of the sun as he slaughter'd sank,
> And dipp'd its cup in the purpurate shine
> When the eastern conduits ran with wine."

Only an intense imaginative response to these lines brings appreciation. A reader scanning them with an intellectualistic set of mind is baffled, confused, irritated.

Our third report upon experimental reactions to a figure of speech, concerns a metaphor in which compression, condensation, is carried much further than in the Arnold or Shelley simile cited previously. The two lines to be quoted constitute the whole of the poem, one by Ezra Pound, a poem which illustrates Pound's own definition of the image " that which presents an intellectual and emotional complex in an

instant of time." The poem, "In a Station of the Metro," follows :—

"The apparition of these faces in the crowd ;
Petals on a wet black bough—"

It is not surprising that this closely packed figure fails to appeal to some readers ; nor that others realize its charm only on re-reading it. But when the suggested fusion occurs the reader is submerged in that feeling of poetic beauty which is one of the mysteries of experience. Innumerable pale faces in the dusk of a dim cavern suddenly whiten, blossom against a blackness that shivers with spiritual desolation.

Let us consider another poem of to-day, "Lost," taken from Sandburg's Chicago suite, a poem chosen because the comparison is deeply embedded in the main image and because the emotional coloration throughout is in such harmony with the sensuous intention of the first two lines :—

"Desolate and lone
All night long on the lake
Where fog trails and mist creeps,
The whistle of a boat
Calls and cries unendingly,
Like some lost child
In tear and trouble
Hunting the harbour's breast
And the harbour's eyes." [1]

Comparatively few subjects image the child visually, a reaction that is, indeed, felt to be somewhat grotesque. Perfect fusion on an auditory basis may, however, occur ; the whistle of the boat melts into the wail of the child. The most commonly reported reaction centres about organic and emotional experiences with perhaps vague visual glimpses of the dim lake and the lost ship. The "lost child" feeling coalesces so perfectly with the emotion aroused by the lines preceding that the lines are felt to be exceedingly effective.

These examples—chosen from many—must serve to illustrate the figurative reaction. It is obvious that we have but touched upon the general problem. Not only variations in reaction as we pass from reader to reader deserve consideration but also variations in presenting the figure, whether it precede or follow the main portion of the comparison, and the degree to which it is telescoped.

[1] Quoted by permission of Henry Holt & Co. from *Chicago Poems*.

We have seen that the background out of which come the main and the accessory part of a comparison deserves especial attention. This background is in part conditioned by the whole production in which the figure occurs; in part, it is determined by the specific attitude or purpose of the reader at the moment of reading.

One may, perhaps, discriminate three possible kinds of background, one of which probably predominates in a given case. The background may be sensuous (imaginal) or emotional or intellectualistic. Two visualizations may have a common setting; both Sohrab and the cypress are seen in the midnight garden. The background may be emotional; the lost boat and the lost child belong together in one's universe of sad things. The background may be intellectualistic; the point of comparison may come to clear consciousness as in an analogy. As A to B so is C to D. The similar relationships between the two parts of the analogy may be focused. Such an intellectualistic background may include critical discrimination with a sense of the inadequacy of the figure. Such a background is often evoked by the experimental attitude. My reagents remark on occasion: "The comparison is far-fetched; insects aren't boats," etc.

In any case, the explicitness with which the point of comparison comes to consciousness is a matter of considerable importance. In the imaginative reaction I am inclined to believe it rarely enters as a distinct sense of relationship. If one review the situation retrospectively one can determine the point of comparison and pass upon its value but in a literary reaction it remains in the fringe or contributes an emotional tone of appropriateness, of fitness, without being focused.

When brought into clear consciousness the point of comparison is often found to be double or triple. Thus the metaphor involved in the poem, "A Station in the Metro," is found to be highly compressed. Readers agree on two points of comparison; the multiplicity of faces and of petals, and the contrast of the wan faces and white flowers with the shadowy background.

Frequently, however, the failure to get a poetic background is shown by the irrelevance of the point of comparison

that comes to consciousness. In nothing more than in this is the difference between the poetic and the prosaic attitude manifest. For the former, there is a tingling subconsciousness of meaning, images, emotions; a rich complexity of feelings concentred in the figure that synthesizes the whole, that crystallizes the saturated solution. The prosaic reader pounces on the comparison as a thing-in-itself *sans* background. He may puzzle over a purely irrelevant relationship or analyse with amused discrimination the curious juxtaposition of things so unlike as the sound of a voice and mission furniture but he fails to make the synthesis that was the figure's reason for being.

Always, of course, a simile or metaphor must be estimated psychologically, not logically. Its value lies just in the union of things apparently quite heterogeneous. Unity arises out of the consciousness of difference, hence the creation of new mental content. It is a turning from the straight and narrow path of logical rectitude; it is meant to be. Its peculiar tang is the outcome of its arousal of a double meaning, with the quivering tension of an unsolved problem.

From the psychological point of view, metaphors might be classified relatively to certain characters of the point of comparison. If the main object vanish from consciousness with the presentation of the secondary object of thought, this latter image may then be very freely decorated with no regard for the point of departure. This gives us the discursive or holiday comparison which Eastman describes so aptly.[1] Or the main object of thought may persist with the presentation of the accessory image; a return to the original object may call forth new images with a heaping up of comparisons. The point of comparison may shift as the figure develops. The explicitness with which the point of union comes to consciousness determines whether the point of comparison will be emphasized or the simile freely elaborated and decorated.

A number of topics suggest themselves as worthy of further study. The development of the figure-making consciousness in the race is an important chapter in the history of mental development. A discussion of this topic would take us too far afield. Naming an object is in itself a comparison, a

[1] *The Enjoyment of Poetry*, p. 83.

latent identification. Prose is, in very truth, " fossil poetry." In the primitive metaphor, fusion is complete for the early comparisons are expressive, not literary, devices. Probably no break between the objects compared occurs; there is no conscious distinction between figurative and literal manner of speech; the comparison or simile is felt to constitute an explanation by means of which the primitive man orientates himself in the objective world. In such instances the metaphor is practically motivated, just as in more developed minds it may be employed to clarify an idea or strengthen a sensuous impression. Still more closely akin, however, to the primitive and child consciousness is that found in cases in which the emotion gives birth to the metaphor, when the white fire of passion fuses objects otherwise divorced. This fusion is very intensive in the primitive and child mind, and in the poetic frenzy. Hence the metaphor which identifies is much more poetic, because much more highly fused, than is the simile which merely asserts a similarity. Thus we end where we began with the conception of the substitution—consciousness as basal.

Sterzinger's investigation showed that substitution (*Unterschiebung*) is a dominating factor in æsthetic pleasure. It is a principal moment in all art as well as in poetic metaphors. In Japanese art, for instance, " Unterschiebung " with reference to colour is a common device. No doubt study of certain modern artists of Europe and America would show curious displacements of elements operating both in imaginal and perceptual constructions. New æsthetic moods or feeling-tones may arise in consequence of substitution. The feeling of dreamlikeness, so frequently aroused by art-products, is called forth through the union of two images, neither of which would in itself give this feeling.

## CHAPTER XIX

## THE CARTOONING CONSCIOUSNESS

METAPHORS in marble are not uncommon; one recalls, for example, Rodin's "Hand of God." Nor are marble metonymies unknown. In fact, many of the curious distortions that are found in modern art may be interpreted in the light of what we know about the psychology of figures of speech, for figurative expression, in literature and in the pictorial arts, has a common significance, a significance explained by the fact that the mind creates its own shorthand and multiplies its own hieroglyphics. In the preceding chapter we have surveyed the metaphorical or dual-meaning consciousness which is the fertile mother of new meanings. In this chapter we shall consider the play of consciousness which issues in such mental patterns as those of hyperbole, or those of metonymy or synecdoche, in which selective attention plays a salient rôle. The part is substituted for the whole, or an abstract quality or simple attribute is allowed to represent a concrete object. Meanings are shuffled like cards. It suffices to say "Virgil," though you mean "The Ænead"; to substitute "sail" for "ship." Thinking is very definitely a short-circuiting procedure and when the telescoping takes place in imaginal form some curious mental constructions may appear; the narrowing of consciousness with a subsequent elaboration of whatever is at the focus may lead to grotesqueries.

In the metaphorical consciousness there is an enlargement of the field of attention, a juxtaposition of two or more objects or situations with a subsequent fusion which enriches thought. In the cartooning consciousness, on the contrary, there is an obsession—often emotionally conditioned—by a fragmentary aspect to the exclusion or subordination of associated aspects. Selective attention appears very early in imaginal representa-

tion. The cartoon motive is frequently evident in visualizations of persons. All details may fade from a remembered face except a pair of squinting eyes or a crooked smile or a hooked and masterful nose. Salient features are seized upon and magnified just as they are by the newspaper cartoonist whose stock-in-trade includes Gargantuan heads, prolonged smiles, thunderous frowns, and whose success is measured by the degree to which he fuses his selected feature with a dominant emotion of the public.

One method of emphasis illustrated in a preceding chapter is that of magnification of an image, a device of the psyche for symbolizing interest or emotion. We may remind the reader of the girl with pathological fear of cats who always visualizes them as mammoth in size.

Children, whose drawings are copies of mental representations rather than drawn from life, frequently reveal their preoccupation by the relative size of various features. Ears are drawn as large as the head; buttons as big as saucers. It has been conjectured that perspective which develops slowly in the drawings of both the child and primitive man originates in the tendency of both to diminish the size of objects in the background because of a lessened interest in them. And drawing of a scene, in distinction from a single figure, may develop out of the continued repetition of a single figure, on account of an absorptive interest in it.

The art products of the insane exhibit the same mental gestures. Repetition of an obsessing feature frequently conventionalized or symbolically masked, disproportion of parts, exaggeration of size, all bear witness to the fact that the artist's inner eye, not his outer one, controls his hand.

So far as sane art is concerned there are very definite limitations to the degree to which concrete objects may be represented by abstract qualities, or emotion allowed to distort experiences. Exaggerations and distortions we permit on the Funny Sheet and in the cartoon but we look askance at them in serious art although it is incontestable that powerful effects have been achieved by such means, as in Rodin's "The Acrobat."

Although emotional exaggeration and selective disproportion are probably pictorial in origin they make less intensive

appeal to us when embodied in marble or pictured on the canvas than they do in verbal form where, translated into fluidic imagery, an evanescent attitude, or a momentary patterning of thought, they may be given wide range. Let us study in this connection poetic hyperbole. Emotional accentuation of this sort is less creative than are metaphorical fusions; it is like an extravagant gesture which may or may not carry the reader with it. As a noticeable mannerism it belongs to the poet or writer whose thought-stuff is highly emotionalized, woven largely of motor and organic threads, whose temperament is impulsive and expansive. Deliberately or without forethought he exaggerates for the purpose of producing in the mind of the reader effects as vivid as he is experiencing himself. To be sure that the reader will get the effect of the very tall man he is visualizing, he calls him a "giant." He must impress his readers with a sense of limitless time. So, with a toss of the head and a sweep of the arm he says "ages."

Vachel Lindsay's poetry which is written in the hyperbolic manner may be studied in this connection. He attempts to give big pictorial effects as in such lines as the following[1]:—

> "Across wide lotus-ponds of light
> I marked a giant firefly's flight";

or

> "Oh, he is taller than clouds of the little earth
> Only the congress of planets is over him."

And again,

> "We are suns on fire, was our yell—
> Suns on fire."

Time and number are dealt with as extravagantly as space. It is not enough to say: "All the millions of the earth"; Lindsay would "recruit all creation."

> "All the peoples and the nations in processions mad and great,
> Are rolling through the Russian Soul as through a city gate."

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[1] Vachel Lindsay, *Collected Poems*. Copyright, 1925, by the MacMillan Company. Reprinted by permission.

" The Ghost of the Buffaloes " illustrates the same preoccupation :—

" They crossed the grey river, thousands abreast,
They rode in infinite lines to the west,
Tide upon tide of strange fury and foam,
Spirits and wraiths, the blue was their home,
The sky was their goal where the star-flags were furled,
And on past those far golden splendours they whirled." [1]

In " The Golden Whales of California," the hyperbolic manner is so exquisitely adapted to the matter that a most successful verbal cartoon results :—

" Yes, I have walked in California,
And the rivers there are blue and white,
Thunder clouds of grapes hang on the mountains,
Bears in the meadows pitch and fight.

The trees climb so high the crows are dizzy
Flying to their nests at the top,
While the jazz-birds screech, and storm the brazen beach
And the sea-stars turn flip-flop." [1]

If we ask what type of reader enjoys hyperbolic expression, the answer is, the reader whose psychic stuff is organic and motor. The precise visualizer finds himself uncomfortable in attempting to see a " heart as big as a wagon," and remarks naïvely when " Samson threw down the gates with a noise like judgment " that undoubtedly that was a very great noise.

" In vessels mountain-high and red and brown,
Moon-ships that climbed the storms and cut the skies
On their prows were painted terrible bright eyes— " [1]

Here is a report on the above fragment by a reader for whom kinæsthetic, organic and mood effects are of the very woof of consciousness :—

" In reading this I have a feeling of bigness followed by a definite shift to one of minuteness as I gaze up the side of an immense warship, which as visualized is a memory image. For the ' moon-ships ' I again feel a largeness and infiniteness which, however, is shocked out by the ' terrible bright eyes ' on prows."

Self-projective reactions to the hyperbole are of particular interest for one frequently experiences curious motor feelings

[1] Vachel Lindsay, *Collected Poems*. Copyright, 1925, by the MacMillan Company. Reprinted by permission.

of magnification and of minification, an effect definitely sought for in certain satires. I get both reactions from reading Shakespeare's famous lines but with a distinct shift in reference :—

> " Why, man, he doth bestride the narrow world
> Like a Colossus ; and we petty men
> Walk under his huge legs, and peep about
> To find ourselves dishonourable graves."

Hyperbole is an expression of the diffluent imagination ; it is Oriental rather than Greek. The American in this respect is nearer the Hindoo than the Athenian. He gets an æsthetic thrill from mere bigness ; a religious emotion from contemplation of numbers. How otherwise could he find it in his heart to measure academic greatness in terms of the multitudinous and clamorous student ? Jumboism is not perhaps to be diagnosed as a disease when it thinks in terms of Woolworth buildings, bridges over the Hudson, Roosevelt dams, and the colossal Pyramids of Egypt. Yet it is but a step from the billion-dollar imagination to the question of the small boy :—

> " How big was Alexander, Pa,
> That people called him great ? "

The numerical imagination Ribot classifies as a form of the diffluent imagination ; it takes pleasure in the unlimited.[1] One number is precise but a series is unlimited in two directions and limitless infinity makes a strong appeal to the emotions. Ribot says of peoples of the Orient that they have played with numbers with magnificent audacity and prodigality. The Hindoos, he tells us, invented prodigious units for their numerical phantasies, the Koti, equal to ten million years ; the Kalpa, 4,328,000,000 years, each Kalpa being one of 365 days of the divine life. The Djanas divide time into an ascending, and a descending period ; each of fabulous duration, 2,000,000,000,000,000 oceans of years ; each ocean itself being equivalent to 1,000,000,000,000,000 years. The sacred books of Buddhism abound in numerical imagination. In them is pictured Buddha " seated on a throne shaded by 100,000 parasols, surrounded by minor gods forming an assembly of 68,000 Kotis (*i.e.* 680,000,000 persons)." All this, Ribot rightly says, makes us dizzy.

[1] *Loc. cit.*

Science gratifies in many ways the numerical imagination. Astronomical infinitudes, geological ages, the infinitesimal constructions of biology and chemistry play upon the emotions that cling to infinite time, space and number. Why, one wonders, has poetry exploited this field to such a slight extent ?

# Book VI

# SPRINGS OF THE IMAGINATION

## CHAPTER XX

## THE UNCONSCIOUS

It was once the fashion to begin a poem with an invocation to the Muse. However artificial such an opening would seem to-day it was in its time a somewhat sophisticated recognition of an element in creative work which in earlier days was very simply reckoned with and attributed to divine inspiration. We no longer think of the hand of a poet being utilized as a tool by a power beyond himself; we no longer consider the ravings of madwomen oracular; we have transferred the whole drama to the mind itself. But the more extensive our survey, the more penetrating our analysis of the human mind, the more we realize its exceeding complexity; we become aware that daylight consciousness flickers over a voluminous and obscure mystery, and that we must look to the twilight or dark of consciousness for explanation of much that startles us on its sudden emergence into sunlit thought. To change the figure, we recognize that much of that which is most vital and significant in the mental drama is played off the boards or, at least, never succeeds in getting into the limelight. "We wish," writes Oliver Wendell Holmes, "to remember something in the course of conversation. No effort of the will can reach it; but we say, 'Wait a minute, and it will come to me,' and go on talking. Presently, perhaps some minutes later, the idea we are in search of comes all at once into the mind, delivered like a prepaid parcel at the door of consciousness, like a foundling in a basket." The margins of consciousness, the haloes of meaning that fade out gradually into duskiness, these are recognized to be important in determining the train of thought. More than

this, curious anecdotes are current of inventions achieved entirely outside of the focus of consciousness, perhaps outside of consciousness at all.

On another level we have interesting reports of motor automatisms, ranging from the imp-like perversity of our own absent-minded self mislaying a ring or destroying a valuable letter to the intricate productions of automatic writers who write and know not what they write or read the words as they flow from their pens with a sense of some agency other than self producing them. We have fascinating examples of sensory automatisms in which bits of forgotten information are recovered by the device of looking into a crystal sphere. Many of us can see pictures in the crystal, commonplace or poetic ones depending upon our mental constitution for we project therein our visual images, but the true scryer may find the crystal a means of restoring to him memories deep-buried in the debris of forgotten days or information that had never before entered the focus of consciousness. Hallucinations, or false perceptions, in which we see or hear things which are non-existent, are other examples of automatism; or, to use other words which imply an attempted explanation, phenomena of dissociation. Hallucinations are obviously infrequent occurrences except in one form, that of the dream. Here we all have first-hand acquaintance with automatic phenomena.

Perhaps the most impressive examples of dissociation are those cases of multiple personality of which we have heard so much in recent years. The outlook on life, the temperamental peculiarities of the multiple selves, may range widely. It is no wonder that in ancient times the only plausible explanation seemed that of possession by a demon, or, occasionally, by a spirit of good.

Dissociated personalities are, fortunately, exceedingly rare; but shifts in mood so extreme that in our hour of melancholy we find it next to impossible to recall any scene gaily toned are common enough. Diverse syntheses take place and our attitude as a shrewd business man may be so different from our attitude as member of a church that it permits deeds at which the churchman, as churchman, would look askance. Only a few of us succumb to the duality of personality that

spells hysteria but at some time or other all have searched wildly for the book that lay unseen in plain sight on the table before us, or we have overlooked in our memoranda of duties the unwelcome letter that should be answered immediately. Nowadays students of normal as well as of abnormal psychology are busy in determining the unconscious bases of mind ; they are listing facts the explanation of which must be sought outside the field of awareness. Tears do not flow without reason, but often without a conscious reason, or with a falsely assumed reason.

The expression " The Unconscious " is often used merely as a blanket-term for ignorance but when used by the scientific psychologist the term is usually an abbreviated hypothesis, which unwound leads straight into the heart of the psychologist's system. The old mechanistic association psychology faced with the problem of explaining the continuity of the mental life and particularly the mystery of memory had recourse to " ideas " below the threshold of consciousness, static existences that waited in the vestibule for their cues before appearing on the stage of consciousness. Later, the ideas were conceived in terms of physiological traces which, however, were as inert as the former " ideas."

With the advent of the psychiatrists and, later, of the psychoanalysts the problem was given a new setting to prepare for the elaborate drama to be played with the co-conscious idea or the unconscious wish in the leading rôle. A shift from an emphasis of the merely static to a stressing of the dynamic was the main gain.

Recently Koffka has phrased the treatment by the *Gestalt* School of the problem of the Unconscious. His exposition is of interest in this connection not only because it stresses the problems of creative intelligence but also because it treats it as intimately one with the rest of psychic experience. For Koffka, physiological traces are not static structural changes as assumed by the older theory, but unitary systems " with stresses which obtain in their interior and which may also exist between one such unit and older systems of units." [1] A more or less isolated unit may " come into contact with

[1] " Structure of the Unconscious," in *The Unconscious—A Symposium.*

other units, thereby producing a new trace-unit which will give rise to a *new process.*" (Italics Koffka's.)

The conception of the anatomico-physiological traces or physical substitutes of " ideas " as dynamic structures able to issue in new patterns or imaginative creations is not peculiar to the *Gestalt* School. Morton Prince, for example, has written of active neural dispositions that ripen below the threshold of consciously organizing complexes.[1] There is, however, a new emphasis by the configurationists since the conception of physical configurations copies at another level their general conception of mental configurations. The notion of a structured unconscious is in harmony with the notion of patterned perception, and the like. It may, moreover, be attacked by the same experimental procedure which has proved so fruitful in other connections.

At this juncture we would emphasize as important the fact that creative intelligence is no special prerogative of the poet or novelist or artist. All adults can cite instances of lucky guesses, sudden insights, unexpected generalizations, surprising bits of repartee that amazed them as much as the individual to whom addressed. The point, however, should be stressed that all so-called inspirations occur strictly within the limit of the individual's capacity, training and previous cogitations. It was to Hamilton, the mathematician, and not to Byron, the poet, that the famous discovery of the quaternions came. " Kubla Khan " was dreamed by Coleridge; the Benzene Theory, by Kekulé,[2] the chemist. Inspiration may be a flash-up from the unconscious but it is no chance explosion occurring indifferently in feeble-minded or genius. Moreover, no intuitions, as such, are guaranteed; their value is in direct ratio to the mind that has them. Error is as often the outcome of inspiration as is truth.

Whether there are certain types of mind that proceed habitually in their thinking by leaps and bounds, while others concentrate with greater continuity and consistency and if so with what effect upon productivity is a question for experimental investigation. It has been supposed that differences in

[1] *The Unconscious.*

[2] Libby, W., " The Scientific Imagination," *The Scientific Monthly,* 15, 1922.

type really do exist, that some men reach their creative syntheses by arduous step-by-step thinking while others see in a flash the conclusion and then need to work out the details. For the first, elaboration precedes the discovery; for the second, it follows. The former go from details to a whole; the latter, from a whole to details.

Ribot [1] has named these types the reflective, or combining, and the intuitive, or abridged, and related them to differences in temperament and disposition. They are, of course, found in all fields of productive thinking so that either science or art can furnish examples. Darwin was discursive in type; Wallace and Chopin, intuitive. Ribot believes that pure types are the exception and that, usually, invention is a mixed process.

Analytical psychology has not gone far in determining the differences in mental content that underlie differences in creative thinking. It is possible that certain aspects of the problem might be illuminated by a more complete investigation of the part played by kinæsthesis in thinking. He who creates mainly in motor terms will possibly be less self-conscious in invention than he who has more extensive recourse to visual and auditory imagery, for kinæsthetic factors less frequently come to the focus of consciousness and more frequently drop from it than visual or auditory components. Automatism is, indeed, usually thought of in motor terms although sensory automatisms also occur in the form of dissociated ideas.

In our earlier study of imagery, attention was called to a peculiar difference between poets in their employment of kinæsthetic or optical-kinæsthetic materials—a difference guaranteed by laboratory reports obtained from unsophisticated subjects. In the case of optical-kinæsthetic material, movement was visualized rather than felt as such. I suggested at the time that this curious difference in presentation of movement on the part of poets might tie up with a difference in creative type although I was frankly indulging in speculation. I anticipated that poets who give us much optical-kinæsthetic material work much more consciously and deliberately than those who present a more purely kinæsthetic content. It is

[1] *Loc. cit.*

noteworthy that Poe and Miss Lowell, both of whom appear to have been highly self-conscious workers, give a remarkable number of optical-kinæsthetic images to their readers.

Do poets actually have a more lively Unconscious than ordinary mortals? The claim that they do has often been made and since their organization must be one highly sensitive to rhythmic patterns which are largely motor in nature it may well be that they do. As a matter of fact every idea that flits through anybody's head is something of a mystery. Where do any of them come from?

The real outstanding problem from any point of view is why some persons' cogitations (conscious or unconscious) issue in *original* patterns, others in stereotyped or conventional ones.

*Gestalt* psychology in instituting experiments on productive thinking by determining the way in which configurations arise through the closures that take place in incomplete structures may in time make an outstanding contribution to the problem of creative thinking.

To illustrate certain possibilities of work let me cite a little experiment of my own. Twelve small four-sided figures in two colours, namely a light orange, or salmon-pink, and a violet, were combined in such a way as to form on the exterior a six-pointed star with alternating colours at the tips and in the interior a dodecagon, again with colours alternating but in reversed order. This design was exhibited to a number of persons for a short period of time. It was then reproduced at set intervals in order to determine what differences would appear in the reproduction of it, after longer and longer lapses of time as the memory-image faded out and gaps appeared in the design, gaps which had to be closed with some form of self-activity. The particular point of interest in the outcome was the revelation of personal differences in the way memory gaps were closed. For many persons there was a strong tendency to fall back on stereotyped figures; a number, for example, substituted for the complicated four-sided figures simple equilateral triangles; others simplified the exterior design so that it appeared as the common hexagonal star. The colours also underwent change. The violet remained true to the original but the less common orange-tint, or salmon-pink,

became the orange of the spectrum. Such changes were in the direction of reducing the design to something more nearly like stereotyped patterns. But other types of change did occur. For an occasional person the design became more and more elaborated, a departure from the simple and conventional in the direction of the chaotic; while in the case of the one member of the group who possessed artistic gifts, the design became with the lapse of time so modified that an original and beautiful design evolved.

It is common knowledge how a story told to a group or an event witnessed by them will undergo changes, how individual disposition operates to close the gaps in memory. The law courts furnish abundant material for study of how emotional factors transform memory material.

It has often been suggested that the first and subsequent drafts of poems can be used in studying conscious elaboration on the part of the poet, or what Miss Lowell calls "the process of puttying." There is much valuable material in existence to which one might turn. Some configurationalist should review it carefully with the purpose of determining what principles of patterning, what types of closure are operating. The extraordinary information that might be gained from such a piece of research is suggested by Lowes' amazing volume, "The Road to Xanadu," in which by appeal to Coleridge's notebook and the books he read, Lowes almost recreates for us the process of creation.

## CHAPTER XXI

## THE SPRINGS OF THE IMAGINATION

> " At this time my imagination took a turn which helped to calm my increasing emotions ; it was to contemplate those situations in the books I had read which produced the most striking effect on my mind ; to recall, combine, and apply them to myself in such a manner as to become one of the personages my recollection presented, and to be continually in those fancied circumstances which were most agreeable to my inclination ; in a word, by contriving to place myself in these fictitious situations, the idea of my real one was in a great measure obliterated."

Thus wrote Rousseau in his " Confessions " before the day of the Freudian psychology. The conception of imagination as compensatory make-believe explains, in part, the motivation that operates in the shattering of memory-experiences in order to remake them nearer to the heart's desire. In a sense the day-dream image may even be thought of as antedating the memory-image ; for in the memory-function reality-thinking is already curbing the dreamer. From day-dreaming to verse or story-writing is but a step. In the latter, the heart's desire is often perfectly obvious. Who can fail to identify the unfulfilled wish so exquisitely embodied in Lamb's " Dream Children " or in Shelley's " To a Skylark " or Tennyson's " In Memoriam " ?

The dream is, according to Freud, cryptic. An obvious wish may seem to be fulfilled by the manifest content, but underlying this is a deeper-seated wish whose fulfilment is gratified by the latent meaning of the dream. In what sense is there also a latent meaning for the literary dream ? And why should the writer mask his meaning ? In so far as the gratification in literary activity as in dream-fabrication is the fulfilment of desires censored by the moral conventions of civilization, the poet or novelist shares in the common psychic repression, and under cover of solution of world-problems veils

his solution of his private one. Perhaps his dreams gain recognition in the world outside to the extent that they gratify a wish more or less universal among men.

If life were completely adequate, if the egocentric desires of the child were thoroughly sublimated, turned, that is, to social ends that in a perfectly objective way brought success in life, would all fiction, all poetry be rejected as infantile? Are all illusions, all idealistic reconstructions of life in terms of eternal values merely symptoms of failures to adjust to first-hand reality? Do we cherish dreams of romantic love, of immortal life, only because of failure in normal functioning of instinct? In a perfectly hygienic and normal world in which there were no poor, no sick, no bachelors nor spinsters, no widows, no mismated, no childless, would there be also no art, no poetry, no religion? Would a perfectly normal world be absolutely self-contained and complacent from the cradle to the grave? Let the dwellers in Utopia answer.[1]

In the meanwhile it would seem that great art is often as severely subordinated to reality-thinking as great science and that mere facile identification on the part of the percipient is not the last word in æsthetic appreciation. Living poets and fictionists do not present themselves for psychological inquisition, and psychoanalysis, which is a dangerous job at best, becomes a doubly dangerous one when there can be no first-hand appeal. Minute study of the life and letters of dead geniuses certainly afford material for illustration of speculative hypotheses but often at too great sacrifice of personal reticence.[2]

In any case psychoanalytic psychology appears to afford no explanation whatever of artistic talent. Given a psychic conflict one may find refuge in regression back to infantile reactions (psychosis) or in sublimation in the form of artistic or other activities. But art as a means of resolution of conflict or of compensatory activity demands very fundamental gifts such as sensitiveness to a particular kind of

[1] In *Plots and Personalities* (Slosson and Downey) I have discussed the part played by compensatory make-believe in plot and character creation. See especially Chapters X and XI.

[2] And often accuracy. See for citation of a particular instance Lowes' *Road to Xanadu*, footnote 128, p. 593 f.

sense-material (visual, auditory, or tactile-motor) and skill in some form of overt activity such as drawing, modelling, bowing and fingering musical instruments or vocalization. These gifts are native, or, the Behaviourist would claim, the result of early conditioning. Psychic conflicts aplenty exist without leading to any artistic creative work; and the converse may also be true; talent may sometimes evaporate because of lack of motivation by conflict. Of course, from the standpoint of the man who enjoys rather than the one who creates art, sensitiveness and motor skill retreat into the background and the function of art in relieving the pressure of life becomes more significant.

From our point of view, that of the stuff of literature rather than its motivation, we are interested in what Freud calls the manifest rather than the latent content of literary dreams. The imaginative individual differs from the unimaginative in the freedom with which he uses the material at his disposal. The richer and more vivid that material, and the more subtle his sense of relationship, the greater the possibilities for creative synthesis.

It is this creative synthesis of which Lowes gives us an incomparable picture in his " Road to Xanadu," a road which is for him a symbol of the imagination " voyaging through chaos and reducing it to clarity and order." The goal is that of pure beauty and in quest of it all experience whether one's own or that recorded by other adventurous spirits is laid under contribution as well as dominant epochal concepts that pattern the blending ideas. Images interlocking through multitudinous associations and coalescing through magical identities, musical words shadowing and haloing the images, all unwinding with precision of a chain of reflexes—so runs the story. Given Coleridge's miraculous memory, his " optical spectra " (eidetic images ?), his flare for words, his active intellect applying curb and rudder to the " streaming associations " and " The Rime of the Ancient Mariner " is as nearly accounted for as any creation can be. And, pointing the contrast to the triumphal blending of conscious and nonconscious control that prevailed during composition of " The Ancient Mariner," Lowes shows how Consciousness played a lone hand in " The Destiny of Nations," while in " Kubla

Khan," the Unconscious played its game alone. To repeat—Lowes has recreated for us the process of creation.

Titchener writes : " In imagination, consciousness proceeds as a whole from the fountain-head of disposition ; there are no limits of any kind save those of individual capacity and experience . . ." [1] Although the problem of personality has been a central one for the last decade we are still woefully in the dark as to its fountain-head ; in particular we have no contribution to make to that curious angle of it that we name style, distinction, the heart of artistic integrity. The undivided personality, to use a configurational term, has somehow eluded the analytical procedure, while the patterned personalities of the psychoanalytic school, such as Jung's introverts and extroverts, have not lent themselves readily to laboratory measurement.

In an earlier chapter, in canvassing the possible relationships existing between temperament and imaginal dispositions, I cited Jaensch's T- and B-types of general psycho-physical reaction systems, characterized by eidetic images. Here is a lead worth following for the psychology of art. Another curious individual difference is that of the degree of control which one has over one's images. Not infrequently psychological investigators assert that our power of voluntary imaging far outruns the uses to which we put imagery. But there are many individuals who assert that their spontaneous images quite outdo in variety and richness and vividness their voluntary productions. It is very definitely true in the author's case who has experienced extraordinary olfactory images and outbursts of orchestral music but has no capacity to call them back at will.

In the case of the obsessive image art-theories have much to learn from psychiatry. Dr Martin has cited some interesting examples of such obsessing images from normal individuals. I cite a part of one report from a young man who received astral visitors, a Hindu and an Egyptian :—

> " At first I permitted these apparitions because they amused me and I could banish them at will. But later they became more persistent and I could not rid myself of them. Particularly

[1] E. B. Titchener, *A Text-book of Psychology* (p. 423). Copyright 1910 by The MacMillan Company. Reprinted by permission.

> the eyes would appear and follow me, without the rest of the figure becoming visible, which caused me much annoyance and distress. . . . A few evenings ago I was reading in bed when a single eye, about four inches long appeared back and at the right side of my book. I glanced at it and continued my reading. Presently the eye came nearer and slid over the edge of the book. It was transparent, and the words were quite visible through it." [1]

It will be recalled how Henry Cowell, the young composer, worked deliberately to gain control over his spontaneous images. Conscious elaboration must be mastered by the creative worker. The literary craftsman acquires a technique by which he learns to utilize inspirations, he may even acquire the habit of having them. He develops various necessary mental sets, rhythmical and otherwise. There is deliberate acquisition of a vocabulary of magic; above all, deliberate documentation. Is it a matter for great wonder that a master-workman such as Masefield should be able so to marshal his forces as to write "Cargoes" in an exceedingly short period of time?

Nicolas Kostyleff in his "Le mécanisme cérébral de la pensée," reporting the outcome of his interviews with contemporary French poets and novelists, stresses their care to document themselves, saturate themselves in the subject-matter of their work, and to enrich their verbal associations. Such documentation eventuates, according to Kostyleff's theory of poetic inspiration, in the formation of chains of associations which when a discharge is once set off results in an unravelling of verbal reflexes. Transition from one chain of verbo-motor associations to another may be mediated by the most subtle connections between them, so that first drafts of poems frequently exhibit apparently unrelated ideas.

Environmental contacts may be needed to start an automatic chain unravelling or stimuli of other sorts may serve to discharge the accumulated energy. Creative workers have much to say of what touches the creative process off. It may be a chance emotion, a stray odour, a conversation with a friend, a mood of Nature—there is no end to the list. Undoubtedly many a genius has learned how to condition himself

[1] "Ghosts and the Projection of Visual Images," *Amer. J. of Psychol.* 26 (1915), pp. 251-257. See also Martin's "Personality as revealed by the Content of Images," *Science N.S.*, Vol. 45.

so as to insure productivity during his working-hours. A particular room, a favourite desk, pad and pencil, the melody of a Remington typewriter—all may become the stimulus that starts invention. Ribot,[1] Knowlson,[2] and others have delightful stories to tell us of the ways of the imaginative worker and William James has suggested that we might utilize biographical material in discovering how to energize ourselves, to tap the reservoirs of talent that most of us never utilize.

Miss Lowell's " scientific definition " of a poet is interesting from this point of view. She defines him " as a man of extraordinarily sensitive and active subconscious personality, fed by, and feeding, a non-resistant consciousness." [3] The last clause merits emphasis particularly if it refers, as it well may, to freedom from the many inhibitions that vex ordinary mortals. Possibly there is a relaxation of attention in the poet which permits the entrance and consequent coalescence of ideas that ordinary mortals keep sundered as the poles, often because of mental sets acquired through the pressure of routine activities or impressed by social conventions. Even prosaic individuals often have dreams which are fantastically original. Lamb was wont to advise young writers who were " balancing between prose and verse " to decide upon their course by the texture of their dreams. " If these are prosaic they may depend upon it they have not much to expect in a creative way from their artificial ones."

In dreams many inhibitions are removed. The pressure of the environment, both physical and social, is lessened. The critical reason is in abeyance. An explanation frequently given for flashes of insight that solve problems after they have been long out of mind is that during the period of inactivity many associations that block the solution have faded out so that on a return to the problem the course lies open. During periods of lapsed practice a similar thing may occur ; increased skill may be evident after a period of no practice.

Undoubtedly poets are made as well as born and in part this " making " involves the throwing off of fetters that for most individuals keep them from being as original as they might.

[1] *Loc. cit.* [2] *Originality.*
[3] Wilkinson, *The Way of the Makers*, p. 262.

## CHAPTER XXII

## THE POET PSYCHOLOGIZES

" To one only will I tell it, do I tell it all day long,
Only one can see the patches I work into quilts of song.
Crazy quilts, I'm sure you'd deem them, quite unworthy
of your prong." [1]

THUS wrote Amy Lowell in answer " To a gentleman Who Wanted to See the First Drafts of My Poems In the Interests of Psychological Research Into the Workings of the Creative Mind." The poem is an upflare of indignation at the impudent psychologist who would " watch my thought's green sprouting ere a single blossom's blown." But in spite of the poet's indignation she had given us a graphic picture of how one type of creative worker—the reflective—goes about his work. What can be more picturesquely descriptive than her expression " crazy quilts of song " or her line :—

" Little limping phantoms, such
Are my poems before I've taught them how to walk without
a crutch." [1]

It is perhaps no cause for wonder that the imaginative worker resents interrogation by the scientist. But neither is it surprising that the scientist continues his probe, because creative intelligence is the outstanding mystery of the world and even an incomplete grasp of the problems it presents has important consequences for philosophy, science and art itself. Moreover, the accounts given us by the poet and fictionist as to how they come by their fabrications are immensely intriguing. How can the inquisitive psychologist remain quiescent in face of Stevenson's delightful account of the way in which the dream-life may furnish the story-teller with plots and characters. He writes in his fascinating " Chapter on Dreams." [2] " When the bank begins to send letters and the butcher to linger at

[1] *Ballads for Sale.* Quotation by permission of Houghton, Mifflin & Co.
[2] In *Across the Plains.*

the back gate, he (the dreamer) sets to belabouring his brains after a story, for that is his readiest money-winner; and behold! at once the little people begin to bestir themselves in the same quest, and labour all night long, and all night long set before him truncheons of tales upon their lighted theatre."

Other creative workers have left us accounts of how their dreams come bringing gifts. Every one knows how Coleridge woke from sleep with "Kubla Khan" at his finger-tips and Masefield has told us how "The Woman Speaks" was dream-creation. The poet saw the Woman very clearly even to all the details of her costume and had a complete consciousness of her whole past life and then "As she passed out of the dream, the whole of the poem appeared *engraven in high relief on an oblong metal plate, from which I wrote it down.*" (Italics mine).

One of the most interesting and detailed accounts of dream-creation is that given us by Edward Lucas White in an Afterword to the Fourth printing of his fascinating novel, "Andivius Hedulio." [1]

> "I dreamed the entire story, and I do not mean had a vision of it while awake, but dreamed it while asleep.
>
> "As I have set forth in my Preface to *The Song of the Sirens*, I have dreamed many tales, not only in day-dreams, but often also in actual sleep. Such dreams of narrative fictions have come to me not infrequently ever since I was under fifteen years of age. Those which I could, after waking, recall more than vaguely, have been of three very distinct kinds.
>
> "Often I move amid the phenomena of the dream as a living man among the circumstances and acquaintances of life, and the vision differs from an ordinary dream only in its coherence and vividness and differs from waking experience chiefly in its possession of a consistent plot, the earlier events of which prepare for and, through engrossing suspense, lead up to a more or less thrilling dénouement and a definite conclusion.
>
> "Oftener and habitually I wake as if after just finishing the uninterrupted reading of a romance of which the plot, incidents and characters are intensely present to my consciousness. Likewise I generally have imprinted vividly on my sight the recollection of the aspect of the book; of its size, shape and binding, of the texture of the pages, of the style of type; at the instant of waking I can almost see the last page; lines, words, letters, capitals, dots, serifs; even to specks in the paper.

[1] Quotation by permission of E. P. Dutton & Company and of the author.

" Not infrequently, instead of the impression of being the chief personage of the romance, I have an uncanny sensation of superhuman and all-inclusive perception; of beholding every occurrence and vista not from any one viewpoint, but rather from the point of view of each of the participants and even, with an unconditioned intuitive cognizance, from all viewpoints at once; of perceiving the inner working of the minds of all the characters in the drama and of being aware of their past lives, motives and purposes.

" Sometimes I have two of these sensations together: I read the book and am the protagonist of the story; or while perusing, I apprehend, apart from the act of reading, every phase of the romance; or, while living the narrative, I am also conscious of every scene, character, situation and happening, even of all the minutiæ of detail, with a detached awareness, as of an impersonal external observer.

" Only once have I, on waking from a dream, had all these three sensations concurrently. I read the book, I was the hero of the romance, and I knew everything and everybody independently of reading the book or of experiencing its incidents. Among my many romantic dreams this far outshone any other; even all the others. Oddly enough, I have not the date of it. It has been my habit to jot down, on waking, a memorandum of each remarkable dream and with a synopsis of it at the first opportunity. Yet of this, the most marvellous I ever had, I lost the memorandum. I only know that it was before Christmas of 1897; I think in the first half of 1896. This book is an attempt to put into printed words the tale I lived, read and surveyed in that dream.

" From it I woke with pangs analogous to those which Stevenson mentions in his ' Chapter on Dreams '; pangs partly self-congratulatory, partly of self-condolence.

" I was elated, for it seemed to me that I had, without any mental effort of mine, been put into possession of an enthralling plot, far better than any I ever had invented awake, or could ever hope to create of purposeful waking volition. I was, in fact, fairly dazzled at the consistency of the tale, at the manner in which the earlier incidents led up to the later, at the sustained suspense, at the deftness, far beyond my conscious capacity, with which each dramatic moment was prepared for and made the most of. And I was amazed at the convincing reality of many of the scenes, at their circumstantial verisimilitude.

" On the other hand I was depressed. I felt that if I had remembered the dream in its entirety and minutest details, word for word, it would have outshone any printed romance. But there was much I could recall only vaguely, much which I could not recollect at all. In the dream the book I read had been in English, but as I lived the tale I had thought in Latin or Greek and I and every one had talked in Greek or Latin; the two sets of images had flowed on together without any jar or any sensation of incongruity. Yet I could not record a single sentence of the Greek, Latin, or even English; I retained only a general idea of their meaning.

" Then, whereas, in the dream, I had been vividly aware of every detail, after waking I retained only a general impression; whereas, for instance, in the dream, every flower and fruit had

been individually recognizable and each exactly consonant with the locality and the season of the year, after waking I recalled, for the most part, only having seen fruits or flowers.

" So all through the tale. And I blenched at the thought of the delving I must do to restore to scene after scene some small portion of the convincing detail it had had in the dream. I shrank from the years of reading."

Not nocturnal dreams only but day-dreams also may function creatively. The creative flash may interrupt a conversation, stop a walk, or interfere with a dinner.

Many writers tell us that the children of their fancy present themselves to them full-grown, issue in full panoply as did Athena from Jove's brain. So startlingly strange does this sudden emergence seem to the creator that often he disavows completely responsibility for the production. Says Musset: " One does not work, one listens."

" What are you doing," Lamartine once asked a friend, " with your head held thus in your two hands ? "

" I am thinking."

" Strange ! As for me I never think ; my thoughts think for me ! "

Even George Eliot, the rationalist, speaks of a " not herself " which took possession of her in her best writing. Charlotte Brontë's biographer [1] tells us that after vain efforts to complete a story " some morning she would waken up, and the progress of her tale lay clear and bright before her in distinct vision, its incidents and consequent thoughts being at such times more present to her mind than her actual life itself."

But lest one assume that the way of the poet and fictionist is an easy one to travel, it is well to recall other reports by the brotherhood in which they stress the difficulty with which they woo the Muse, the long hours of effort and seeming emptiness which precede the creative synthesis or follow it. They may even report as did Poe in his account of how he wrote " The Raven " that the whole process is one of ratiocination, of deliberate weighing of effects. " Most writers—poets in especial—prefer having it understood that they compose by a species of fine frenzy—and ecstatic intuition—and would positively shudder at letting the public take a peep

[1] Mrs Gaskell, *Life of Charlotte Brontë.*

behind the scenes, at the elaborate and vacillating crudities of thought—at the true purpose seized only at the last moment —at the innumerable glimpses of idea that arrived not at the maturity of full view—at the fully matured fancies discarded in despair as unmanageable, at the cautious selections and rejections—at the painful erasures and interpolations—in a word, at the wheels and pinions—the tackle for scene-shifting—the step-ladders and demon-traps—the cock's feathers, the red paint and the black patches which in ninety-nine cases out of the hundred constitute the properties of the literary histrio."

Sundry psychologists have warned us to beware of the psychologizing of the poet. His greatest gift—that of imagination—may lead him to dramatize and attitudinize to such a degree that his so-called introspections, however delightful as fiction, have no value as science. An indirect approach is counselled; for example, the study of the first drafts of poems, of notebooks, of sources. Certainly such supplementation should be resorted to, nor should first-hand reports be taken uncritically at face value, and yet they indubitably do possess some significance for the psychology of the creative mind. They may be compared with profit and validated by reports from trained introspectionists.

The reports by literary geniuses on their dream-creations tally remarkably with what we know, through other sources, on dream-psychology. Take, for instance, certain details of their reporting which are very like those found in technical articles on reading and writing dreams; the baffling experience of attempting to decipher blurred writing, the " almost seeing," the sense of getting the content without being able to fixate words, the creation of quaint neologisms.

Many dreamers, just as Stevenson and White, comment on the engrossing suspense with which they watch the unfolding of their dream-plots and their surprise at a thrilling and unexpected dénouement. Such incipient dissociations are common in dreams and mirror the slight dissociations which literary workers report as automatic activities, perhaps personifying their co-consciousness and describing it as the Brownies, White Presences, Astral Visitors and the like.

" Who are the Little People? " Stevenson asks—then answers his own question. " They are near connections of the

dreamer's, beyond doubt; they share in his financial worries and have an eye to the bank-book; they share plainly in his training; they have plainly learned like him to build the scheme of a considerate story and to arrange emotion in progressive order; only I think they have more talent. . . ."

Thus graphically Stevenson states the fact that dreams, however strange they seem to the dreamer, are yet the product of his patterned personality. Professional and habitual mental sets hold over into the dream-life although few learn as thoroughly as did Stevenson how to inveigle the little People into a commercial partnership. Yet this is not quite the whole story for the freedom of the dreamer from sundry inhibitions does enlarge the range of possible creations. Thus Stevenson tells how on one occasion his Brownies entertained him with a little April comedy which really belonged to Mr Howells. " But who would have supposed that a Brownie of mine should invent a tale for Mr Howells ? "

It would be quite possible in this connection to study the Freudian mechanisms that operate in dreams; dramatization, symbolization, fusion, over-determination, compression and the like. But the analysis would take us too far afield and, besides, this type of presentation is to-day easily accessible.[1] Instead, let us note the interest many contemporary poets take in a somewhat technical psychologizing of themselves. Many of them have more than an amateur's acquaintance with psychology and are born introspectionists.

Where, for example, can one find finer introspection than Conrad Aiken's account of his state of mind during composition ? He describes it in " Scepticisms " as a sort of dual consciousness in which the many passages leading downward to the subconsciousness are thrown open, and the communications between the upper and lower planes are free and full. Such a dual consciousness may be achieved by the deliberate touching off of an idea which explodes downward " with ramifying fires through the mine-chambers upon which by association one desires to draw," or there may be an accidental explosion. The train of fire may be started by the

[1] For an excellent summary see Ernest Jones, " Freud's Psychology," *Psychol. Bul.*, Vol. 7, pp. 109-128. I believe a most profitable study could be made of literary invention, using these same concepts, not as a way of discovering hidden meanings, but as a tool for analysis.

merest chance, by a phrase encountered, or by stimulation of the senses.

One of the most interesting of reports is that by Marguerite Wilkinson in the Introduction to her volume of poems entitled "Bluestone." This poet writes her lyrics to inner tunes for some of which she gives the musical notation in her narrative. Her careful and detailed report, which deserves careful study, raises questions which actually suggest laboratory problems for the configurationists. She notes, for example, that if her lyrics happen to take an iambic pentameter rhythm they "seldom grow tunes of their own" and she queries whether this is due to the triteness of this rhythm. She conjectures, too, that her method of composing lyrics is akin to that followed in the making of folk-songs—another fertile idea. Of the rests that occur in her chants, Mrs Wilkinson states that they give time for realization of the pictorial quality of the lines (visualizations ?). She describes the visualization that accompanied the composing of "An Incantation" but (curiously) there is no evidence of specific utilization of such visualization in the poem itself. Are these visual images suggested indirectly ? An experiment in the laboratory would answer the question.

In her book "The Way of the Makers," Mrs. Wilkinson has collected statements from present-day Americans concerning their methods of work. They are worthy of careful analysis because of their slantwise illumination of the psychology of types as well as for the light they give on the poetic imagination. Miss Lowell, for instance, gives a clear-cut report on her inner speech, a report which might be duplicated in a laboratory experiment. William Rose Benét advises actual practice in visualization as part of the poet's dreaming and intense visualizing in the making of a poem. "Then think of your visualization in terms of the greatest music you know."

One of the special capacities of the imaginative mind is its memory for emotional and mental subtleties which the average man may experience but straightway forgets. The literary mind—since this is in part his stock-in-trade—notes and retains such material. The psychologist may well be grateful that in his off-moments poet and fictionist are ready to analyse their professional experiences. Here is a golden mine to be worked by the trained scientist.

# Book VII

# LITERARY SUBJECTIVITY AND OBJECTIVITY

## CHAPTER XXIII

## A FEW WORDS ON EMPATHY

Imitation has been frequently appealed to by historians in their discussions concerning the origin of art. Sculpture and painting reproduce the objects in the outer world; drama copies the actions of the world of men. Poetry in indirect fashion mirrors the human emotions. True, a conception of art as photographic is obviously inadequate. It has been rejected *in toto* by certain artists who even in the realm of painting and sculpture would follow the ideals of absolute music and evolve a pictorial art that rejoices in sheer melody of line and colour. Their interesting arraignment of traditional views may force us to a more intimate analysis of the origin and purpose of art production. But, in any case, in *contemplation* of art imitation appears in subtle fashion. It is not merely that we grow breathless with the runner on canvas as we do when watching him upon the field; not only that we writhe with Laocoön, or sink into a contemplative mood with Michelangelo's "Thinker," but every arch of stone, every cedar box, every curving vase induces subtle personal reactions. We pause at sight of the broken column. Our sense of its meaning is a realization of the arrested eye, the checked breath. The slender pillar topped with heavy cornice overweighs us; we too yield under a too heavy burden. The misshaped pitcher oppresses us with the sense of our own inadequacy.

Not in contemplation of art only but also in that of Nature we mark these inner imitations, these psychic posturings, these organic echoes. There is a lift of the whole body upward, an intake of the breath, as the eye follows the out-

line of a slender Monterey pine, rising a hundred feet above the shrubbery at its feet; a deep expiration as we glimpse the fanlike boughs across the sunbright cloud. The long lines of a level sunset, the expanse of the prairies, quiet the inner tumult by their control of the pulsations of the organic life. In complete surrender to the æsthetic mood, these organic reverberations are read back into the object. The babbling brook is described as breathless; the forest glade, as mysterious. Moods are objectified and given names of natural objects. We speak of the moonlight mood; the mood of the stars, of spring, of autumn. They are as real as beams of sunlight on heavily tasseled corn.

If we are analytically exact we must distinguish actual mimetic movements from movements of perceptual adjustment. It is one thing when I copy by my attitude, actual or imaginal, the posture of Michelangelo's " Thinker " or Rodin's " Balzac "; I speak then very properly of mimetic realization. It is another thing when the lines of a statue or building release certain movements of accommodation, certain kinæsthetic and organic patterns of perception which as integral parts of an emotional complex reinstate this complex in the act of contemplation. The æsthetic object becomes coloured with the ease or inadequacy of adjustment; it is itself a pattern of grace or of incompleteness.

Famous analysts among psychologists and art-critics have given us many subtle modulations of the doctrine of inner imitation and of psychic participation. Their technical term for this process of psychic participation is *empathy*, or a process of " feeling-in," in which motor and emotional attitudes, however originating, are projected outside of the self. One authority defines the term so as to include the " reading into impersonal and often inorganic objects of the organic sensations, feelings, emotions, and desires that are really in ourselves." E. B. Titchener states that empathy is " the name given to that process of humanizing objects, of reading or feeling ourselves into them." [1] From one point of view we subjectify an object; from another point of view, we objectify the self. We assume attitudes and emotions in obedience to demands of the outer world, then refit the world with these patterns

[1] *A Text-book of Psychology*, footnote, p. 417.

which have become intensified through intimate realization of their meaning.

Our understanding of persons also is moulded by something akin to empathic processes. Through subtle imitation we assume an alien personality, we become aware of how it feels to behave thus and so, then we read back into the other person our consciousness of what his pattern of behaviour feels like. Much further reaching than sympathy is empathy. We may sympathize at times when we cannot empathize because of inadequacy of experience.

The doctrine of æsthetic empathy will no doubt develop in unexpected ways as its mechanism becomes better understood. It has come to be a much-inclusive term, since it covers not only consideration of mimetic realization (inner imitation) and movement patterns as contributing the emotional or mood tone to perceptual complexes, but also, by and large, the problem of the projection of all self-experience into the object.

In general, I have sought to exclude æsthetic theorizing from the present book. One speculation I wish to venture, namely, that æsthetic experience is largely concerned with the projection of *affective* reactions into an external world; it is an objectification of emotions; the creation of a universe of mood values.

In the genetic process, sense-qualities have long since been objectified, solidified into very substantial percepts. Sweetness is conceived as a property of sugar; yellow as a property of the sunflower. Pressed back by the philosopher, we know that sweetness arises in relationship between a tongue and chemical properties; that green is not inherent in the grass but the outcome of waves of a certain vibratory rate acting upon retinal cells; that this world of outer percepts has been built up by millions of years of organic reactions solidifying into racial habits. In æsthetic reactions, the projection of affective qualities is in process of taking place. A universe of emotional objects is in course of construction, a universe to be constituted by externalization of delicate personal emotions which are carried by subtle variations in accommodatory movements of the sense-organs, modulations of breath and of pulse. Self is the very core of such creation

since it is in process of projecting or externalizing itself. The so-called secondary qualities of matter—visual, auditory, olfactory—are essential to the æsthetic product but kinæsthetic and organic qualities contribute the self-feelings that unify the object. It has been said that in many cases of empathy we subjectify an object rather than objectify the self and undoubtedly this is true. We assume attitudes in obedience to the demands of the outer world, then refit the world with these attitudes, intensified by intimate realization of their meaning.

For detailed comprehension of the processes of empathy there is need for experimental studies with simple material, such for example as Bullough's work with colours which we have already described in Chapter IX where the transition from physiological and associative reactions to the æsthetic reaction on the basis of projection into the colour of the subjective state was indicated. That something similar in nature occurs in reaction to words was suggested by my own connotation experiment. The latter analysis must, however, penetrate much further into the patterns of auditory perception, if we are to gain information in respect to it comparable with the rich material furnished us by the investigators of visual form.

## CHAPTER XXIV

## SELF AND ART

In certain respects the æsthetic doctrine of empathy reminds us of the psychoanalytic doctrine of identification. Identification has been studied largely from the point of view of the organization of selves rather than the constitution of a universe of values. Two phases of it are recognized, that of inclusion within the self of alien experiences, the introjective phase ; and the exclusion of inner experiences, the projective phase. Fundamental processes of psychic assimilation and repression are involved in the process of identification which, taken inclusively, cover the whole field of self-integration and individualization. The introjective phase of identification includes all that is commonly spoken of as " identification," the mergence of self with the crowd or group, the feeling of unity with the hero or god.[1] Projection, in contrast, attributes to the not-self the self-experiences. It ranges from imputing to others one's own sins, to projection of a whole body of memories and habits into a dual self.

The æsthetic doctrine of empathy stresses, chiefly, behaviour patterns released through the sheer activity of perception, a much more evasive process than that of social identification. Moreover, while the response to art may be that of the participant (identification in the narrower and popular meaning of the term, when, for example, the reader feels himself to be the hero of drama or novel) the truly æsthetic response does not stop there. It goes beyond introjection and projection to a final assimilation of the projected experiences, a complex integration.

We will need to consider in some detail the relation of the Self to Art and to stress as with other topics the fact of

[1] For a genetic treatment of Participation, see Murphy, *Primitive Man*, Chapter X.

individual variation. According to Müller-Freienfels [1] three types of response should be recognized: that of the Ecstatic, the Participator, and the Spectator. A few words will be given to the description of each variety of reactor.

First of all, the Ecstatic, for whom all self-consciousness is merged in the perfect unity of subject and object that occurs under conditions of intense enjoyment. There is such an identification with the objects perceived that the "I" seems utterly lost. One becomes that which he is enjoying. George Sand's description of her own ecstatic experiences have often been quoted in this connection :—

> "There are hours," she writes, "when I go out from myself and live in a plant, when I feel myself as the grass, as bird, as tree-top, clouds—hours when I run, fly, swim, when I unfold myself in the sun, when I sleep under leaves, when I float with the larks or creep with the lizards, when I shine in the stars and fire-flies, when, in short, I live in every object which affords an extension of my existence."

Quite comparable to this is a report by a former student of mine :—

> "I am the tall white lilies and feel tall with a slender swaying feeling that goes to my head, and makes me a trifle dizzy. I am rolling masses of music; or I dance with notes with flying feet until my heart beats rapidly.
>
> "I am in the winter snow-storm with great gusto. I seem to dance and throw my arms about and rush madly on until I feel all gloriously alive and strong.
>
> "I enjoy particularly nature poetry that personifies as Shelley's 'Cloud,' because I more easily translate myself into such poetry. In the 'Ode to the West Wind' I may have the run of all the globe."

Vachel Lindsay phrases the same reaction :—

> "I am no longer man, but cloud or tumbled maple-leaf."

Often, for the Ecstatic, with loss of self, both time and space orientation lapses. He passes into the trance of the mystic and may lose consciousness even of the art-stimulus. Perhaps such ecstatic enjoyment is most commonly experienced in listening to music.

There is, secondly, the Participator, (*der Mitspieler*) who takes upon himself another self, who can sink himself in another personality, play many rôles. The spectator may

[1] *Psychologie der Kunst*, Leipzig, 1912.

assume one personality after another, although, no doubt, with varying degrees of success. A thorough-going facile identification may coexist with a low type of art-consciousness.

> " When I read," writes one, " I readily become quite deaf and insensible to ordinary interruptions. I am living a great number of different lives. I laugh and cry with the characters until it is a discomfort for me to read anything emotional in a place where I may be observed because there is danger that I may seem to be insane if I allow myself to enter into the book."

Of course, not merely the type of reader is potent in determining the form of reaction but also the kind of literature read. Short stories, novels, and dramas would seem to encourage the attitude of personal assumption of emotions, often to the exclusion of all possibility of artistic evaluation of content. This is evident in many current discussions of books or plays of the day which turn upon the questions of personal liking or sympathy. Here's an interesting comment on a modern play, " The Circle." The lady who made the comment was critical of the play because she considered that the characters—presumably of high social standing—did not show good breeding ; they lost their tempers (at cards !) and were profane at slight provocation. Their manners impressed her as rather worse than their morals.

" When I go to a play," she said, " it is as if I made a social call and I do not enjoy meeting people whom I should refuse to call upon in real life."

Obviously she was taking the participant attitude, although keeping herself in the background. It would be interesting getting this lady's reactions to a play featuring a level of society with which she was absolutely unfamiliar, in which case she might achieve detachment as we shall see from the discussions in the following chapters.

The participant attitude is common in prize-winning letters, that stress, usually, the human interest motive. Here is one from an " O. Henry Prize Contest."

> " To my mind the best example of O. Henry's art is the ' Unfinished Story.' We can all feel with Dulcie her longing for her share of the joy of living. Poor little Atom with her beauty-loving soul and her starved and colourless existence. We sense her struggle. We sorrow for and with her in her joyless life. We want to shelter her. We want to make her

life happier. We wonder how we ourselves would stand the strain of hunger, hard work, lack of clothes and loneliness."

There is, thirdly, the attitude of the spectator who retains his own personality—in art enjoyment he is the spectator, the onlooker (*der Zuschauer*). Such an attitude may be found very notably in the critic, whose enjoyment never swamps his capacity to estimate the value of a work in terms of his own criteria ; but it may also occur in the most artistic of spectators who maintains a godlike detachment in the face of conflicting emotions, which interplay as colours upon an extended canvas.

Merely sentimental verse depends for its appeal upon psychic identification ; imaginative poetry, on the other hand, may lead to the purest form of æsthetic realization. Often, obviously, the novelist or dramatist seeks no more than to induce sympathetic identification with his characters. He is content with an ephemeral triumph, for it may be observed here that the participant attitude probably leads sooner to satiety and desire for change than does the more detached attitude of æsthetic projection.

Many details of literary method find their explanation in the relation of self to the literary experience and suggest problems for investigation. The demand of the average reader for " sympathetic " characters testifies to his assumption of the participant attitude. Furthermore, the " arbitrary character "—as Brander Mathews calls him—who for the purposes of the plot does silly things, must not be the hero or heroine although he may be the villain.

In this connection one may raise the question of the relation of grammatical form to projection of self into a given situation. The statement is frequently made that in the last analysis it does not matter greatly whether a story be told in the first or the third person. On theoretical grounds one must question this. Certainly the " I " form would seem to be conducive to the assumption of a foreign personality ; the third person favours the spectator's attitude, detached or æsthetic. An intermediate form occurs where the " I " of the story is not the principal character but an interested and, usually, friendly spectator. Here the reader takes on the desired personality—doubly filtered as it were. This method lends itself to heightened idealization of character since the

narrator may vicariously assume all blemishes or defects of comprehension. A still more subtle utilization of such a method of extrusion of unlovely and yet human traits occurs when the narrator is hostile to the character, a hostility that often results in passionate idealization on the reader's part of the undefended personality with extrusion of just those traits that make the narrator odious. The fine point to which such a method of characterization can be carried is evidenced by the effectiveness of Browning's " My Last Duchess."

Possibly when the " I " of the story is a blustering hero or extravagantly egoistic individual the use of the first person actually induces " humorous detachment " on the part of the reader, hence its justification.

The telling of a story in the second person is attempted so infrequently that one finds oneself curious concerning the reason for the almost universal rejection of such a literary form. Analysis indicates that two very different attitudes may be touched off by this device. In the first instance, the " you " to whom the story is addressed is the intimate confidant or the second self of the hero. The dear reader may get the feeling of being " de trop," an outsider overhearing something not meant for his ears, an uncomfortable feeling fatal to sympathy and one which may become critical to the last degree, ready to pounce upon anything strained or grotesque in the story. Only when the effect produced is pictorial, æsthetically veiled, is this form a successful one.

In the second case the " you " addressed is *every reader.* There is such confident expectation of the reader's assumption of the participant attitude that he is thrown on guard. The effect is that of literary ranting, beginning with a climax, instead of working it up gradually. Furthermore, the myriad-minded reader who likes to try on different personalities finds himself too rigidly limited in his outlook. Hence the bored or fatigued feeling that results from any extensive use of the second person form.

None the less, the You-form may be recommended for literary experiment. Given a theme with a universal appeal, the adoption of the reader as the hero of the story or as the hero's sympathetic shadow may be successful. The effectiveness of Eleanor Abbott's " His Happy Day," told in the

second person form, is in part explained by the assumption at first of the viewpoint of the little child, naïvely confident of the sympathy of the world with his whimsies, his tragedies.

What attitude does the writer assume during composition ? The participant attitude would seem to be a not uncommon one. Witness some of the curious stories told of Dickens, such as his being overcome by sorrow at the death of Little Nell. An artistic writer, however, always retains detachment enough to be able to weigh his work critically, to achieve an objective evaluation of it. In this, pre-eminently, is to be found the difference between the imaginative creator and the madman. Both create new worlds of reality, but the madman's world is one of purely subjective value ; the universe of the other may be rediscovered even though it require first a long voyage and a slow reading of dimly charted seas.

In the next chapter, we shall discuss in some detail an attempt to attack experimentally the relationship of self to art.

## CHAPTER XXV

## LITERARY SELF-PROJECTION [1]

THE empathic image—its explanation and function—is a more subtle matter than that of mimetic realization of, or sympathetic participation in, character. No immediate pattern for imitation may have been presented. The mind in response to verbal suggestion creates images which it presents in a motor framework which may be localized in the person of the reader or projected into the object itself. Here the distinction previously made between optical-kinæsthetic and felt-kinæsthetic images is in point. Felt-kinæsthetic and organic disturbance may be mimetic in intent, but optical-kinæsthetic imagery in which the movement or mood-complex humanizes the object is empathic. In the latter case the feeling-in process has been carried one step farther than in the former. But self may appear in art situations in still more overt fashion, as for certain observers of picturers, who visually present themselves to themselves in an expressive or contemplative attitude. You may, for example, see yourself on the canvas move down the long avenue of trees or behold yourself standing by the rippling stream. Here inner imitation assumes a whimsical form since it not merely echoes organically the mood of the picture but externalizes, projects into the picture, the semblance of the self in its emotional response. It is not enough in fiction to feel the emotions described; one may see oneself garmented in them. At this point we may very properly turn to actual records of self-projection, obtained under experimental conditions.

By self-projection is meant an explicit consciousness of self-content in any form of imaginal representation whatsoever.

[1] In this chapter I have made free use of my report on "Literary Self-Projection" in the *Psychol. Rev.*, 19, 1912. By permission of Editor.

The term projection is retained in spite of the criticisms that have been directed against its use in this connection. A definite localization of the self-image, when visual, in any one of the space-possibilities that Dr Martin has described so adequately may occur, and in this respect the visualization of the self appears to be projected as much as, but no more than, any other image. The term self-visualization might seem sufficient in itself to suggest projection. Self-projection emphasizes, however, not merely the fact that the self-image has a localization but also that the self-representation as such bears definite orientation and relation toward the rest of the imaginal content. Moreover, it appears that the kinæsthetic self-image may also be objectified and localized and that in certain instances there may be an actual fusion of the self-kinæsthetic content with visual content not-the-self. In this case we have projection not only in the sense of external localization but also in the sense of translocalization. In an earlier chapter numerous illustrations were given of stereotyped images of the self ; many visual, others kinæsthetic. We said that these images served practical purposes since they might be utilized to fixate a professional aim or a social ideal. We saw, also, that the image of the self, stereotyped or flexible, might be projected into external space as were other images.

In the experiences which we are about to review, we are concerned primarily with the projection of the self into an imaginal scene which is illustrative of poetic or fictional content. Often this self-reference takes the form of a visualization of the self, which may be seen as a more or less vague figure of the proper sex with little that is specific in the way of facial or other detail. On the other hand, this visualization may be very specific and clad in a copy of the garments the observer is wearing at the time of the report. I have in mind one young woman whose self-visualizations are charmingly detailed. This visualized self of hers is always definitely placed and seen from a definite position. Sometimes this self appears close at hand and life-sized. On such occasions the details are vivid and a complete description can be given of the appearance of the self, the style of hat, colour of dress, etc. At other times, the self appears far off, from half a block to half a mile. It then seems indistinct and reduced

in size. An example of such self-visualization in response to a poetical fragment is given below.

The fragment reads :—

" I stand amid the roar
Of a surf-tormented shore,
And I hold within my hand
Grains of the golden sand—
How few ! yet how they creep
Through my fingers to the deep,
While I weep—while I weep ! "—(Poe.)

And the reader's report :—

" Visualized and felt self on the shore ; optical movement of waves. Saw and felt the sand falling through my fingers ; sad relaxed feeling. Saw self distinctly from behind ; self wore white dress and big floppy straw hat."

Self is often projected into a literary scene in terms of felt or imaged kinæsthesis without visual accompaniment or with visualization of a figure other than the self. Sometimes, such attitude or movement appears curiously objectified and at times is projected or fused with a figure felt not to be the self.

In the following report we have an excellent example of inner or sympathetic imitation ; possibly under other than experimental conditions the organic complex would have been completely objectified and fused with the visualized posture, for it is obvious that introspective analysis may prevent complete æsthetic absorption in the æsthetic object.

The fragment concerned is one from Keats' " Hyperion," as follows :—

" Upon the sodden ground
His old right hand lay nerveless, listless, dead,
Unsceptred ; and his realmless eyes were closed ;
While his bowed head seem'd list'ning to the Earth,
His ancient mother, for some comfort yet."

The reader reports :—

" Perfectly clear-cut visual image of the old man in the posture described. Tactual and kinæsthetic feeling of the sodden ground. Feeling of weight and relaxation in right hand. Kinæsthetic feeling of bowed head and of closed eyes. Auditory attention, with strain in ear."

Another reader, in reporting on the same fragment, suggests the possible loss of self in the object :—

"Put self into the old man and slight tendency to get outside and see old man."

In contrast to these reports comes a third :—

"As observer I am north-east of visualized self and of old man. Visual self about one hundred feet off, looking at old man who is twenty feet farther off. No imitation of old man's posture."

The extent to which a kinæsthetic or organic imitation was felt and given either a self-reference or projected into and fused with a visual or other object of consciousness varied greatly from subject to subject.

The individual differences may be best appreciated by a comparison of the reports upon a given fragment. The fragment, from Poe, follows :—

"Glides spectre-like, unto his marble home,
Lit by the wan light of the hornéd moon,
The swift and silent lizard of the stones."

Of thirteen readers four reacted with kinæsthetic imagery, that induced to a varying degree identification with the gliding lizard.

Thus B :—

"A crawly feeling. I saw a poisonous-looking lizard writhing his way into a ruined marble hall which was slimy and moss-grown from age."

And G :—

"I see a lizard running among the stones on a clear moonlit night . . . I seem to feel the movements of the lizard . . . as if I were running around on my hands and feet watching for enemies."

Of the other subjects, six projected themselves into the scene. Three of these projections were visual and show no empathic qualities. For instance, I reports :—

"Visual of self standing, sketch."

And J :—

"See self lying on ground. . . . Lizard thirty feet away. . . ."

Two readers get a tactual self-reference. Thus A reports :—

"A ruined wall among other ruins on a hill, the faint moonlight, the lizard. A feeling that it is a very warm, still evening; the image of touching the lizard."

Of the three subjects who give no self-projection, D's report is characteristic :—

> " Visual and optical-movement image of dark lizard gliding toward broken columns, between whose shadows is seen the crescent moon."

M, a subject who reports no case of visual self-projection and who, in general, has very vague schematic visual images, gives in response to literature a high number of empathic reports, particularly in the form of kinæsthetic empathy. He identifies himself, in kinæsthetic terms, with waving flowers, palpitating trees, flying insects and the like. For Shelley's lines :—

> " Wheeled clouds, which as they roll
> Over the grass, and flowers, and waves, wake sounds,
> Sweet as a singing rain of silver dew."

M gave the following report :—

> " Movement in chest ; spreading forward of hands in space. Feet not on ground. Become the cloud ; feel of the cloud. The cloud, if conscious, would feel thus."

Again, in reading of a rain-storm, he reports :—

> " I go out and am there. Kinæsthetic consciousness. Dripping ; I become the little drops ; small and ethereal."

A fragment descriptive of a sea-shell evokes the delicate reaction :—

> " Emotional tone of iridescence, *Einfühlung.* I become blue and change to silver."

Summarizing, we may say that self-projection may occur which is not empathic. A visual self-projection may be of this sort. The visualized self is but a spectator of the scene. Such visual self-projection may become empathic when fused with it are projected kinæsthetic, tactual, or organic images. That frequently such fusion fails is shown by those instances in which the subject feels in person the kinæsthetic experience and does not project it into the visualized figure of the self. The objectified kinæsthetic or organic factors may, on the other hand, fuse with visual material other than that of the visual self. The visual objectification may take form as a person not the self or assume the form of object of the inorganic world. Sometimes there occurs kinæsthetic consciousness

without visual accompaniment, and such kinæsthetic consciousness may or may not be objectified.

It is most interesting to note that one may sift from these reactions the three types of response described in the preceding chapter, not, however, overlooking transitional forms nor the general complexity of the situation as a whole. There is, first, the reader whose attitude is detached, that of the critical and, at times, disinterested onlooker or spectator. Such a reader often projects himself visually but when he does so he appears on the outskirts or margin of the scene. His reactions being cool and impersonal are often very constant and may have critical value.

Secondly, there is the sympathetic participant who takes upon himself the emotions and conditions described. There is intense warmth of personal consciousness, rich organic and definitely egocentric application. The reactions of such reagents are apt to be variable, incalculable, since they may be blocked by momentary moods, by the dispositional tendencies present at the time of reading. A visual self-image may or may not constitute part of the reaction.

There is, third, the reader who with intimate realization of the situation or emotion projects it beyond himself as a characterization of the object. This third reaction would seem to be the æsthetic reaction *par excellence*. It is, in its purest form, the rarest of the three and it interplays with them. Visualization of the self is very infrequent in this third form of reaction for in this case the warmth of personal realization suffuses the object, rather than the person reacting.

At the risk of wearying the reader I would cite a few further introspections, that give point to these typical differences.

One of my reagents, whom from long acquaintance I know to be temperamentally detached and critical, summarizes her reports upon her reactions to a series of emotional fragments of poetry thus :—

> " In all projections I am there as a *spectator*. I see the surroundings. I stand to the left or in front. I am hidden."

Another reagent finds herself, again and again, a spectator only :—

> " Here, I am," she writes, " an outsider, watching the children

at play. I am standing just outside the scene and watching it." And commenting upon the fifth stanza of Browning's "Love Among the Ruins," "I am an outsider, looking at this. In a sort of hollow looking up at the turret. Out of one of its windows a girl with yellow hair is leaning. I see her but she does not see me."

How greatly such a reaction contrasts with the report of the participant who becomes part of the scene and writes :—

"Waiting in the turret, watching the sunset. Very pronounced kinæsthetic sensations. Exultant mood; wildly happy."

The key-expression in the reports of this latter reagent is the phrase, "In the midst." She is "in the midst" of the gardens, "in the midst" of the desert; in the mountains.

The third type appears in the reports of the reader of "Andrea del Sarto," who writes :—

"Faint visual sense of two figures at window. I see the scenes mentioned from his standpoint and into him I project the emotions which I feel."

The following reaction by the same reader to Swinburne's "A Forsaken Garden" (fifth stanza) shows not merely sympathetic participation, but also an æsthetic evaluation of the scene described :—

"As my eyes go seaward there is a feeling of identification with the lovers but with a prophetic realization of the futility of passion and of the hundred years that are to come."

Müller-Freienfels' "Spectators" would, in our experiments, appear to fall into two classes, only one of which is thoroughly æsthetic. Between the two attitudes of detachment there lies a world of intimate experience through which the participant (*der Mitspieler*) is in process of passing.

Dr Martin's records[1] also contain examples that show plainly this difference in reaction between spectator and participant. Dr Martin concludes that the localization of the visual self-image is mainly useful in enlarging the field of vision; to make plausible, for example, the observing of a scene from a bird's-eye point of view or the seeing of a bit of a situation that lies behind one. The material with which Dr Martin was dealing undoubtedly suggests such an inter-

[1] Die Projektionsmethode und die Lokalisation visueller und anderer Vorstellungsbilder. *Zsch. f. Psychol.*, 61 (1912), p. 321.

pretation of her data. In my experiments the form of self-reference was, however, determined not merely by the spatial demands of the object or the situation visualized, but also by the kind of æsthetic reaction characteristic of the subject.

We realize that through some trick in handling it æsthetic content involves objectivity. The mere swamping of the self in violent emotion, the melodramas of life are not æsthetic. But neither is the cool weighing of emotional symptoms by the clinician. Only when the object itself takes on the subjective reaction does enjoyment become suffused with æsthetic beauty. We pass from detached intellectual evaluation of content, through emotional realization, into æsthetic objectivity. Subjectivity of experience is an essential intermediary. And this subjectivity involves personal reaction, emotional realization, unique experience. From moment to moment we shift our attitude. At one moment the cool detached observer, we weigh situations in the balance of logical judgment; at another, we yield to the personal phase; at a third, we find our own life colouring the universe, we give of our inner wealth to the world at large. When the personal factor, the practical interest, looms too large we cannot command detachment. Our passionate demands as individuals deny us the achievement of the æsthetic attitude.

The new psychology has familiarized us with the notion of art as a compensatory substitution for reality, as one way of gratifying censored or at least unfulfilled desires. But art should not be identified too uncritically with mere day-dreaming, which is described as an expression of wish-thinking in contrast to reality-thinking. Literature or art that is little more than a sublimated form of wish-thinking encourages the assumption in reader and spectator of the participant attitude and hence stops this side of great art.

In its break with personal practical motives, great art achieves a detachment which allies it with such reality-thinking as we get in science. Wish-fantasies—spun by the insane—fail to achieve this objectivity and detachment and are not art-products. And the wish-fantasies of social reformers fail in artistic outcome for the same reason. Utopian romances are usually of historical rather than æsthetic interest.

One may, in fact, find a very close relationship between the

æsthetic and the scientific attitude, since both involve impersonality, objectivity of point of view, interest in reality. The detachment of the experimental scientist and that of the artist frequently exasperates those individuals whose attitude is always that of the participant with practical interests. They demand, not criticism of life, but immediate reconstruction of it. But the attitude of detachment makes possible the most fundamental reckoning with reality and great art achieves this detachment without losing its emotional content.

In studying self-projection we approached the subject of objectivity from the standpoint of art-appreciation. In the next chapter we shall consider the technique by which the artist seeks to give objectivity to personal emotion, through creation of what has been called psychical distance.

## CHAPTER XXVI

# HOW LITERATURE ACHIEVES ÆSTHETIC OBJECTIVITY

In daily life we are largely preoccupied with Close-ups. Only infrequently in our workaday hours is there a clipping of practical interests which results in æsthetic detachment. Often the æsthetic attitude is initiated only to be rudely shattered. Perhaps catching a glimpse of a lovely young girl we find ourselves rapt away in contemplation of her loveliness when, deftly, she pulls out her mirror and a powder-puff. She has destroyed the illusion. Unless, perchance, she be dancing across a stage to music, in which case she may powder her nose in public—if she does it rhythmically and not too efficiently—and still remain an object of æsthetic interest, because so many of the threads of daily life were clipped with our ticket when we entered the theatre. A beautiful woman in life rarely creates purely æsthetic effects, even when distanced by all the devices of ceremonial or those of stage-craft. She too inevitably arouses in men the personal, the possessive attitude; in women that of curiosity and envy. Not even when her beauty is embodied in marble or reduced to a mystery of light and shadow is it sure to give an impersonal effect.

Bullough uses the expression *psychical distance* as a figurative description for all manner of ways by which personal experience may be projected and made æsthetically valid. Distancing begins in actual spatial and temporal separation from an object, as in the case of a thunder-storm that is viewed from a distance or after a lapse of days; it ends in the most delicate reaches of æsthetic remoteness. Psychical distance, Bullough explains,[1] is obtained by separating the object and its appeal from one's own self, by putting it out

[1] "Psychical Distance," *Brit. Jour. Psychol.*, 5 (1912), pp. 87-118.

of gear with practical needs and ends. Distance does not imply an impersonal, purely intellectually interested relation such as that of the scientist's. " On the contrary, it describes a *personal* relation, often highly emotionally coloured but *of a peculiar character*. Its peculiarity lies in that the personal character of the relation has been, so to speak, filtered. It has been cleared of the practical concrete nature of its appeal, without, however, thereby losing its original constitution." There are two ways of losing distance in art. The artist may " under-distance " or " over-distance "—" the verdict in the case of underdistancing is that the work is ' crudely naturalistic ' ' harrowing,' ' repulsive in its realism.' An excess of Distance produces the impression of improbability, artificiality, emptiness or absurdity." What is most desirable both in appreciation and production of art is the " *utmost decrease of Distance without its disappearance*." This, Bullough calls the "antinomy of distance."

Curious individual variation in capacity to distance experiences are found. For most of us this capacity is distinctly limited. Few of us can project violent personal emotions. A railroad wreck in which one's mother lost her life would resist one's effort to distance it and use it as literary material. If our next-door neighbour chance to be a poet or short-story writer who utilizes neighbourhood happenings or his own sentimental romances as literary material he seems to some of us to be lacking in delicacy, in sensitiveness, when as a matter of fact he simply possesses the gift of distancing his personal experiences in a way we others are much too self-centred to achieve. The absolutely egocentric person in whom such distancing is impossible is thrown into agonies of self-consciousness at thought of publication of a love-letter or an autobiographical confession.

Always, for me, a foreign language distances impressions and gives them atmosphere and æsthetic detachment. Greek conveys the greatest distance; French, the next greatest. Something remote and charming clings to the ideas that come to me through the medium of these two languages. Thus it was that when, one time, I chanced, in a discussion of the feminist movement by a French sociologist, upon an account of suffrage in the State of Wyoming, and the first woman-jury

of the world that had been for me a household tradition because my father was an attorney in the case, a sudden shift in values took place. Seen through the perspective of an alien's eyes and a strange idiom the matter-of-course situation became literary, romantic, with the glamour upon it of remote ways and daring philosophies. Always before I had thought of equal suffrage as a proposition which might ruffle one's logic or temper but never one's æsthetic susceptibilities.

In the conception of psychical distance we find a solution of certain old quarrels between realism and romanticism. Obviously, there is no experience which, theoretically, cannot be utilized artistically, provided the artist knows how to distance this material for his public. Individuals in whom the power of distancing is slight will demand idealized portrayals of life and refuse their sanction to the inclusion of trivial incidents or commonplace characters. To such readers a clucking mother-hen as the main symbol in an Imagist poem and the sordid characters of the Spoon River Anthology will seem to violate certain eternal canons of art; the same symbol and characters will thrill other readers with a sense of the all-inclusiveness of beauty and its multiform aspects. Modern clinical studies of sick souls seem morbid to readers who do not distance readily such sordid experiences as those undergone by Claude Fisher in Cyril Hume's "Cruel Fellowship." Only because of its double filtering through the consciousness of two persons, that of the novelist and that of the friend who presents him with a character for a story-book is the unhappy wretch of the latter novel made a possible subject for art.

The concept of psychical distance clarifies also the problem of the relation of morality to art. All sensations when properly distanced become material for art; no question as to their morality or immorality can arise for such a question involves a thorough-going practical attitude. We share the emotions of the magnificent harlot or of the drab woman of the town when distanced by the art of the novelist or the playwright or even by geographical or racial perspective, although we should pass both with averted eyes on the streets of our home-town.

The actual psychological mechanism by which psychic

distance is created is unknown. Experimental investigation is probably possible but its procedure rests in the hands of some ingenious scientist of the future. A point of departure may be found in the further analysis and explanation of the spatial characteristics of the image, as we have stated in an earlier chapter. *Distance* is, perhaps, more than a metaphorical description of what happens when æsthetic objectivity is achieved. The trance-feeling which in certain respects is akin to the feeling of distance may be conditioned by optical factors, such as the steady fixation of the eyes during visualization, or by some other form of rigid kinæsthesis when other sense material is concerned.

Obviously we distance certain experiences much more readily than others, largely those that are already spatially projected. Visual and auditory impressions detach themselves easily from personal interests; not so organic and tactual sensations and sensual passions. The loveliest of hues never tugs at the heart as a baby at the breast; the most poignant strain of music never stings as does contact with naked flesh. It is always, however, the organic resonance that gives emotional warmth and life to art. This is the hard thing that the artist must achieve; he must distance his own vital and intimate experiences. The pragmatic sanction for his work is found in his creation of a vaster emotional universe and he succeeds in proportion as he distances the stuff of life itself. He must, however, reckon with his public and a utilitarian and conventional public will resent an attempt to handle the brutal, the ugly, the commonplace, in its stark nudity; it will demand a veiling of life, a shift in values. It drives him to the technical conventionalities of art; the pedestal and cold whiteness of sculpture; the framed misty landscapes and idealized portraits of pictorial art; the cadenced verse and alien diction of poetry; the heroic figures and remote events of the epic novel.

Literary technique includes numerous devices for achieving distance; both form and content may contribute to over or under-distancing or to its nice balance. One recalls, for example, the use of time-perspective and of spatial perspective as used by poet, dramatist, and novelist. The one sentence, "Some time before the fall of Babylon" confers distance on

a drama. Because the story " The Crescent Moon " is laid in the inaccessible remoteness of South Africa the bonds that tie us to our own environment are loosened. Vague generalities have a distancing effect. A dark forest under the eternal stars suggests a degree of distance lacking in a Halsted drug-store in Chicago. " They," in Kipling's story are mysterious visitants from another world; Rossetti's " Jenny " is very human.

Passion is distanced by a cold setting. The bitter coldness of St Agnes' Eve in Keats' poem confers extreme remoteness upon a fervent love-story. Illicit loves amid frost and snow have an excuse for being one cannot find in hot midsummer nights. Note the setting of Maeterlinck's " Pélléas and Mélisande " : —

> " It is very gloomy here. It is true the castle is very cold and very sombre. It is very cold and very deep. And all those who dwell in it are already old. And all the country seems gloomy too—with all its forests, all its old forests without light."

Always an ocean-setting, with its infinite expanse, its mists, its sweep of storm, or starlit calm, has had unique power of producing æsthetic distance. No man apparently so brutal, no incident so commonplace as to withstand the alembic of the sea. Prose characters and plots become saturated with poetry in the sea-stories of Conrad, Masefield, O'Neill.

May Sinclair, in " Three Sisters," has described beautifully the creation of æsthetic remoteness by natural effects :—

> " The moon was hidden in the haze where the grey day and the white night were mixed. Across the bottom on the dim, watery green of the eastern slope, the thorn-trees were in flower. The hot air held them like still water. It quivered invisibly, loosening their scent and scattering it. And of a sudden she saw them as if thrown back to a distance where they stood enchanted in a great stillness and clearness and a piercing beauty."

Actually *Distance* becomes a matter of the most delicate of compromises. If the poet uses the language of the gutter he must manipulate his stuff so as to create remoteness by other means than diction. If the playwright permits his characters to make an informal entrance from the body of

the theatre, to cross the curtain-line, or to address the audience directly he must create distance by other means. Eugene O'Neill's "The Hairy Ape," which surrenders many old devices for securing distance, has recourse to other original ones, as, for instance, the introduction of the marionettes of Fifth Avenue, those mechanical grotesque caricatures of after-churchparaders, who see nothing, hear nothing, comprehend nothing.

A profitable history of stage-craft might be written from the point of view of distance, beginning with the more-than-life-sized figures of the Greek drama, draped and buskined, with their rigid masks and their monotonous voices obtained by the use of a mouthpiece in the mask and ending with the phantom effects obtained by the new art of stage-lighting, by gauzy curtains and mirroring wall. Many of the conventions of the modern stage which had seemed to us inevitable, as for example the falling curtain, are being treated with some lightness by recent adventurers in play presentation. There have been attempts to break down the invisible fourth wall of the stage and to bridge the gap between stage and auditorium.

In some of the modern mystery plays the participant—rather than spectator—attitude is deliberately induced. The audience is tricked into believing that a real murder has taken place on the stage and that he is being detained as witness in the case. All psychical distance is rudely shattered when you find policemen stationed at your elbow and eyeing you suspiciously, while the Chief of Police, leaning over the edge of the stage, shouts that no one will be permitted to leave the theatre until the mystery of the murder has been cleared up Such crude participation in drama is sometimes entertaining but not often æsthetic.

Distance may be shifted with great rapidity. The writer may play with it whimsically, over- and under-distance in rapid adjustment and readjustment of perspective. From such shifts there may result a feeling of ludicrous incongruity —which may be just the effect sought ; or if very skilfully done, such manipulation of psychical distance may cause a rapid shunting of emotional tone from one situation to another essentially remote. Incongruous effects are planned with

humorous intent in the musical comedy where the modernized American darky or an up-to-the-minute salesman strolls through the splendours of the Court of the Queen of Sheba and exchanges current slang with the Oriental ballet. Extraordinary manipulation of distance occurs in Dunsany's "A Night at an Inn," in which his grotesque ponderous Idol—distanced in every way—comes to play a part in a close-up of a cockney English scene. The fascination of "Toffy" in the same play is his combination of near and far, of sordid and heroic qualities, a combination that has given distinction to many rogues in literature and has, occasionally, in life conferred a charm upon the great criminal.

It is, however, inadvisable to shift psychical distance very rapidly. Juliet climbs down from her catafalque to take her curtain call at some risk. In amateur theatricals knowledge of the personal history of the members of the cast operates to make consistent distancing a difficult matter, particularly in love-scenes. Often, too, the amateur breaks character, a thing that only the great comedian can do successfully. Not but that the amateur also stimulates laughter by this means—fatal laughter!

In much of our reading we are content to assume the participant attitude and do not ask the writer to manipulate psychical distance in a masterful way. But in poetry—except when we are concerned with merely sentimental or sermonizing verse—we ask, usually, for a distanced effect. Its employment of measured rhythms, tallied rimes, sublimated characters, and a peculiar phraseology has given it great psychical distance. The effort of original geniuses to reduce this distance by such a device as the breaking up regular rhythms, through introduction of commonplace characters, by the use of the idioms of daily speech and the language of the newspaper brings protest from many sources. It is again the problem of reducing distance without losing it; and the æsthetic sensitiveness of the reader as well as that of the poet is involved. Contemporary American poets have played with psychical distance in illuminating ways. "North of Boston," "The Spoon-River Anthology," "Chicago Poems," experiment on the greatest possible reduction of distance. Frost, at his best, works a miracle of near and far vision.

A curious paradox must be noted here. Brutal or realistic poetry that smells of the masses or of the dusty attics of life will make its appeal, in the first instance at least, only to the most highly sensitized readers, to the æsthetic aristocrats. Only the most sensitive among men will distance crashing realities, as Sandburg distances them. Yet if man is to learn to live serenely in this stupendous new world he has himself created he must acquire this secret of detachment, and find æsthetic values in modern machinery, modern industrial war and, above all, in modern scientific preoccupations. He must develop a sense of the illimitable into which Main Street opens at either end. To help him do this is the great function of novelist, dramatist, and poet.

## CHAPTER XXVII

## THREE STORIES

If, by chance, your morning newspaper should contain an account of a peculiarly atrocious murder, say the walling-up of a living man in a tomb, his death by slow starvation and prolonged agony, the paper would fall from your clenched hand. "Fiend!" you cry. You understand for the nonce the red passions of the mob. You throb with moral revulsion.

In the next Sunday Edition you find the murderer's life laid bare; you begin to probe motives; to glimpse a background. Little by little your moral revulsion becomes tempered with curiosity, perhaps understanding; you sense a drama which, still later, drives you to the court-room. But the modern newspaper and the modern trial in court rarely achieve for you complete objectivity; for this you must go to literature where as it chanced this very type of murder has been the climax-event of three superlative stories: Poe's "Cask of Amontillado," Balzac's "La Grande Bretèche," Wharton's "The Duchess at Prayer." [1]

Similar in theme and in emotional coloration, jealousy, the three tales handle very differently the problem of æsthetic detachment and therefore afford excellent material for examining the matter in detail. A brief résumé of the plot, setting, and characters of each story is necessary.

First, Poe's "Cask of Amontillado." Montresor's enemy, Fortunato, is enticed by subtle playing upon his vanity into the chill catacombs of the Montresors that, ostensibly, he may pass the judgment of a connoisseur upon the genuineness of a cask of Amontillado. Lured on and on, beneath ever lower arches, he steps at last into the ultimate niche, the tiny interior recess of a dim bone-lined crypt, and, of a sudden,

[1] Scribner's Magazine, 28 (1900), pp. 151-164. Quotations by permission of Charles Scribner's Sons and of the author.

is fettered by Montresor to a granite wall. There follows swift and skilful walling-up by Montresor of the entrance to the niche; moaning cries from Fortunato; shrill screams that turn into low laughter; and a last agonized appeal: "For the love of God, Montresor." Then a torch is extinguished, there is a jingling of bells and the placing of a last stone. "In pace requiescat!" Nothing tortuous about such a plot. With incredible swiftness and directness it moves toward a terrific climax.

The setting of Poe's story is, as it were, etched in black and white. The one word "Rome" appears under the title; the time was "one evening during the supreme madness of the carnival season." For contrast, we have the motley garb, the tight-fitting parti-coloured dress, the conical cap and bells of Fortunato, and the damp chill catacombs of the Montresors where the nitre "hangs like moss upon the vaults" and the walls are lined with human remains.

There are only two characters in the story: Fortunato, complacent, unsuspecting, the dupe of his own vanity; and the crafty, suave, unhuman Montresor, with a double-edged wit but a piercing singleness of purpose, who savours delicately the gradations of Fortunato's fatuous vanity and his childlike credulity, but for his own part shows no blurring of hatred by pity, no hesitation, makes no apology.

In contrast to the swift movement of Poe's tale, we have in Balzac's story a leisurely unwinding and untangling of a mystery rooted in illicit love and sex-jealousy. The story is pieced together as a picture-puzzle, highly coloured, infinitely fascinating. A fragment here, another there, slips into place until the whole picture lies before one.

The story is many times filtered in the telling, first of all, by the romancing temperament of a gossipy Doctor who, in reminiscent mood, counts the terrible histories in his repertory that he may choose the right one for an after-dinner story. Then, in succession, as introduced by the Doctor and presented indirectly through his personality, we have the contribution of a notary, a long, slim, black-clothed man with small pointed beard and livid face, frocked in an old coat but with a diamond in the frill of his shirt, loquacious, officious, heavy-witted; next, that of a landlady, jovial and stout, "eyes full

of secrets" ; last, that of the lady's maid, whose transparent personality permits a shift to an omniscient point of view, and a quickening of the narrative.

The Doctor after telling of his own discovery of a deserted mansion called La Grande Bretèche, quotes the notary's account of the harrowing death there of Comtesse de Merret and the making of a will that forbade entrance to the mansion for fifty years. He gives the landlady's characterization of Monsieur de Merret, handsome, tall, with a temper of his own, and of his Comtesse, the most charming and richest woman in Vendôme, a real jewel of a woman. It is the landlady who tells also of a former lodger of hers, handsome de Feredia, a Grandee of Spain. She recounts his midnight excursions, and his final inexplicable disappearance, which, she surmised, was somehow involved with Madame de Merret's trouble, for a crucifix of ebony and silver seen in the possession of de Feredia is like a crucifix buried with the unhappy Comtesse. Last of all, there is the tale of the Comtesse's maid through whose eyes we see Monsieur and Madame de Merret together on a night when he has returned home unexpectedly. We sense the sudden outflaming of suspicion on his part that her closet harbours an intruder. We hear her calm lie that no one is in the closet, a lie sworn too on a Spanish crucifix, and a second lie when he questions her when and how she obtained the crucifix. The husband summons a mason, bids him wall-up immediately the door of the closet ; he promises him a reward for swift work and for silence thereafter. The Comtesse manœuvres to suggest that in the walling-up of the closet a crevice be left at the bottom of the door ; and for one instant we glimpse the dark face of a man with fiery eyes to whom she signals hope. At dawn, Monsieur departs with the crucifix to test the Comtesse's story ; he returns to discover her furious efforts to demolish the wall that has just been built. She faints in terror. "For twenty days that man remained beside his wife. During the first hours, when sounds were heard behind the walled door, and his wife tried to implore mercy for the dying stranger, he answered : 'You swore upon the cross that no one was there.'"

The setting of "La Grande Bretèche" is as carefully

planned as a stage scene—an isolated brown mansion visible only from the crest of a mountain because otherwise hidden by the overgrowth of a neglected garden in which it lies buried. Box-edgings run wild, fruit-trees are untrimmed, weeds drape the river banks. " An invisible hand has written the word ' mystery ' everywhere."

Mrs Wharton's story of " The Duchess at Prayer " is an old man's memory of a strange tale of two hundred years since, told him by his very ancient grandmother who was an eyewitness. It is a tale of an exquisite laughter-loving young Duchess, torn from her joyance in Venice, gay city of music and gondolas, and imprisoned in a beautiful but remote villa by the Duke, her husband, who is for ever closeted in his library. When to this villa comes a young kinsman of the Duke's, youth turns to youth, laughter to laughter, a circumstance which arouses the Duke's cold anger and leads him to banish his cousin from the villa. Later the Duke also departs, and the Duchess, alone, with no companionship save that of a sour chaplain, the Duke's spy, takes refuge in religious devotion. She spends hours in prayer in the chapel, just off her chamber, and, in particular, develops great passion for a sacred relic in the crypt under the chapel—a stone coffin containing a thigh-bone of the blessed Saint Blandino. That she might at will descend into the crypt and kneel by the coffin, the Duchess had the stone slab in the chapel that blocked the entrance to the crypt replaced by a wooden one.

One May-Day the Duke returns to find the Duchess, robed in shot-silver and pearls, just gone to the chapel to say a litany. Behind the Duke's coach is a long string of mules and oxen drawing a cart carrying " what looked like a kneeling figure wrapped in death-clothes." It proves to be a tribute by the Duke to the piety of his Duchess, a sculptured image of her " to be placed before the chapel altar just over the entrance to the crypt." Vain the Duchess' prayer that some other spot be chosen for placing the image, so that the opening to the crypt be not sealed up ; vain her prayer that one night more be hers to spend in devotion by the side of the sacred relic. Amid her weeping the crypt is at once rendered inaccessible.

Then the Duke begs to sup with the Duchess in her

chamber; an extraordinary feast that ends with the Duke's toast to his young kinsman, "I drink to his very long life—and you, Madam." And the Duchess, "And I to his happy death," the empty goblet dropping from her hand as she falls face downward on the floor. She died after a night of horrible suffering, teeth locked so that "our Lord's body could not be passed through them." So ends the tale, except for the report of a little maid who with her own eyes saw the smiling face of the statue of the Duchess over the crypt change to one of frozen horror.

The setting of "The Duchess at Prayer," is exquisite. There are lovely landscapes glimpsed from the loggia of the deserted villa; jewelled interiors. In the gardens, "An opulence of dahlias overran the box-borders between cypresses that cut the sunshine like basalt shafts." Within, "ebony cabinets, with colonnades of precious marbles in cunning perspective, alternated down the room with the tarnished efflorescences of gilt consoles——"

Every character in the story is sharply etched. The Duke, "high-nosed and cautious-lidded . . . when the Duchess laughed he winced as if you'd drawn a diamond across a window-pane. And the Duchess was always laughing."

The Duke's cousin, "beautiful as a Saint Sebastian, who sang his own songs to the lute in a way that used to make my grandmother's heart melt and run through her body like mulled wine."

The Chaplain, "who brings a sour mouth to the eating of the sweetest apple."

Very beautifully these three stories illustrate various devices by means of which life is transformed into art. Told to us as a life-incident, we would dismiss Poe's unbelievable narrative of Montresor with the shuddering comment, "Mad!" Balzac's story of passion and crime would impress us as the melodrama of the Sunday newspaper to which we referred. The venomous jealousy of the deceived husband; the beauty, the deceitfulness, the agony of the Comtesse; these, in other garb, are the threadbare passions of innumerable scandals, the tremendous passions of life for which men pay tremendously. Wharton's Duchess is not so manifestly of our world; she is Beauty eternally betrayed.

In the artistic use of such material, our authors illustrate various possibilities. They have created æsthetic detachment to a very unequal degree. Poe's story is given little psychical distance. It is told in the first person, with no softening of perspective, with no filtering of the tremendous passion, and hence can make its appeal only to those readers who possess natively great æsthetic and imaginative capacity. Such readers are able to give distance to naked life and to them Poe's story is supremely great.

Balzac's story is distanced in a number of ways. The mansion which hides the crime is overgrown with weeds, and in this way a remoteness in time is suggested. The story is told circuitously; it is, after all, only hearsay, gossip; it is a mystery, filtered through the imaginative and sympathetic temperament of the romance-loving old Doctor. And yet with all its distance, Balzac's story leaves the reader shaken by life just as the women at dinner-table where the Doctor told the tale were silenced by the terrible dénouement of the story.

"The Duchess at Prayer" is given objectivity in every way possible. It is set off as a picture. There is a detached introduction suggesting remoteness, a remoteness accented by the tourist's absorption in the lovely Italian scene visible from the loggia of the shuttered villa he is exploring.

> "Below the terrace, where a chrome-coloured lichen had sheeted the balustrade as with fine *laminæ* of gold, vineyards stooped to the rich valley clasped in hills. The lower slopes were strewn with white villages like stars spangling a summer dusk; and beyond these, fold on fold of blue mountain clear as gauze against the sky."

The old caretaker of the villa tells the story, again with the effect of distance, perspective, detachment. "He was the oldest man I had ever seen; so sucked back into the past that he seemed more like a memory than a living being. . . ." In every way a very great remoteness in time is stressed. The artificial roses in the chapel were "grey with dust and age, and under the cobwebby rosettes of the vaulting a bird's nest clung." The villa is "composed as a dead face, with cypresses flanking it for candles. . . . No one comes here, nothing changes and the old memories stand up as distinct as the statues in the garden. . . ."

An accentuation of distance in " The Duchess at Prayer " is produced by the presentation of the Duke and his Duchess in the first instance as portraits, hung in the deserted palace. Again, there is an increase in distance given by the touch of the supernatural in the story, the inexplicable shift of expression on the face of the statue of the Duchess, after the living prototype realized the awful price she and her lover must pay for their hours of delight.

In one detail, these three so different stories, agree ; the same note is sounded. The cask of Amontillado is secreted in the *chill* vaults of the Montresors ; the notary of Vendôme dwells upon the " *glacial* death-chamber " of Madame de Merret ; says the old, old man of the Duchess' chapel, " This is a bad place to stay in ; no one comes here. It's too cold." Thus is hot passion at once made more intense and yet distanced.

To recapitulate : Poe's story is naked passion presented starkly ; Balzac's is the old wine of gossip mellowed by age ; Wharton's is a picture in a jewelled frame. The reader's preference will be determined by the ease with which he is able to distance life, to see it detached from his own personal emotions and sensations.

## CHAPTER XXVIII

## HYPNOTIC ART[1]

THE grave-digger in "Hamlet," the little prince in "Pélléas and Mélisande," the Ancient Mariner—that grey-beard loon—why is it they impress us as wise with an insupportable wisdom? They are only a clown, a little child, and a madman!

A singing cadence, a rhythmic dance, a re-echoed refrain, a magic phrase cast spells upon us. How? They are but sound and lulling movement! Gorgeous palaces are seen beyond dim shadows; phantom ships sail phantom seas; beauty beckons to us from forest aisles; we wake as from a trance. Again, how and why?

"Hypnotized, your Honour," is a plea which, when entered by the prisoner at the bar, thrills us with a sense of psychic mystery; but when it is cited in explanation of our own experiences of fascination, we find ourselves questioning its validity. Does art really practise hypnotic spells? Are poet and dramatist ready adepts in the art of scientific magic so that they can capture our fancies willy-nilly, imprison us in their own worlds of fantasy, and bind us to the strange and halting philosophies of guileless folk? It is indeed an arresting question.

The hypnotic state is characterized, chiefly, by abnormal susceptibility to suggestion. With normal suggestibility each one of us has personal acquaintance. All of us, all the time, are open to influences from without. An idea, a so-called suggestion, penetrates our defences and suddenly we are tapping a foot in time with a whistled tune, or passing on a yawn that is circulating an audience, or following a circus parade or a political one. We are inflating our sleeves or

[1] This chapter in slightly different form appeared originally in *The Bookman*, Vol. 48, under the title "Literary Hypnotism" (copyright, 1919, by George H. Doran Co.; all rights reserved). Reproduced by permission.

depleting our pockets. The daily triumphs of fashions and creeds illustrate our dependence upon external influences, our uncritical following of sundry leaders. But normal suggestibility has very definite limits. We may indeed follow our leader but always with a chance of rebellion if our dormant reason stir. If his antics become too fantastic, our fear of appearing ridiculous awakens; if his egotism becomes too pronounced, our own is put on the defensive. Possibly he violates some deep-seated prejudice or moral premise of ours; hence the parting of the ways. But in a state of excessive suggestibility our reason may fail to enter protest even in the face of most ridiculous assertions. A national craze or a violent mob shows the outcome of abnormal suggestibility when our critical faculties are in abeyance; as they are in dreams, for instance, in which we commit murder with never a twinge of conscience, or butter our beautifully written love-letters with lemon jelly—and never a smile on the part of the complacent self.

Now the hypnotist knows how to throw the critical faculty out of gear. He induces a state in which one's inhibitions are inhibited. He may, for example, lull you into acquiescence by fatiguing the attention by the steady drip-drip of water, or startle you into docility by transfixing your attention by a sudden flash of light. In any case he puts you into a condition in which you believe whatever is told you and act cheerfully on information received. You are called a dog and you bark in assent. You are called Napoleon and you strike the attitude of the Little Corporal. You are said to be struck by lightning and your features freeze in an expression of horror.

Increased suggestibility is the distinguishing mark of hypnosis. Other symptoms there may be but authorities differ as to which of them are essential, which merely artifacts of suggestion. It will suffice to mention such disputed symptoms as catalepsy, hypersensitivity, post-hypnotic amnesia, rapport, or the imperviousness of the hypnotized to any suggestions other than those emanating from the hypnotist. Undoubtedly, during hypnosis, the above effects may be induced by suggestion as well as such phenomena as positive and negative hallucinations, hypermnesia, and anæsthesia.

Rapport which we shall have occasion to refer to again in connection with literary suggestion merits particular attention. It is the opinion of many investigators that it is the outcome of autosuggestion. The sleeping mother is *en rapport* with her sick child although heedless of the movements of the healthy urchin in the next cot. A sleeper may be *en rapport* with his clock and heed its strokes although deaf to the roaring of the storm. One falls into the hypnotic sleep with the thought of the hypnotist uppermost, so that one is awake to his actions and words although oblivious to those of other men. Even in the waking state such a narrowing of consciousness occurs. The lover is *en rapport* with his mistress and alive to variations in voice or manner that no one else observes. The ecstasy of love would seem to show *rapport* at its highest. The desire for solitude *a deux*, the restlessness under distractions, may finally pass into a restricted consciousness. This involves not merely an amazing sensitiveness to the glances and the tones of the beloved, but also, at its extreme, an insensitiveness to the presence of others, an absorption so complete that it may lead to those revelations of passion that issue so often in tragedy.

The psychoanalyst gives us a different theory of rapport in terms of emotional suggestion. The affective submission to parents is transferred to the hypnotist who becomes a surrogate for the father. Whatever enhances the prestige, or authoritativeness, of the operator increases this submissiveness, this docility, this accessibility to commands.

Let us now consider briefly the different ways by which the hypnotist seeks to induce hypnosis. He may suggest sleep ; dwell upon the idea of drowsiness till drowsiness ensues. He may startle his subject into an abstracted condition by a sudden explosion, a dazzling flash of light, an authoritative command, an induction of the father-child complex mentioned in the preceding paragraph ; the attitude of submission to authority. The hypnotist may employ monotonous stimulation, such as will induce fatigue of attention. Falling water, a humming induction-coil, gentle strokes may serve his purpose. He thus induces the mother-complex, the acquiescence granted to love, child-like docility.

Of the latter method of inducing light hypnosis, nature

makes subtle use. How somnolent her music! The drone of rivers, the purring of brooks, the murmur of the wind in pine-trees, the drowsy hum of summer insects! Very skilfully have nature's hypnotic influences been utilized by poets who have had recourse to woods and streams for inspiration. The oracle of Dodona, where the rustling of wind through groves of oak and beech became articulate, has never been silenced. At other times, nature spells us in other fashion. She may fascinate us by the glitter of sunlight in a dewdrop or by the scintillation of frosty stars in the velvet black of a winter sky; she may paralyse us by the crash of sudden thunder or the cannonading of tempest.

Let us turn now to literature. One purpose of art is to plant its suggestions in a fertile soil; another purpose, to give its imaginations a local habitation and a name; to so embody its visions that they become realities. It can best accomplish its first purpose if it can throw the critical faculty out of gear and induce a condition of abnormal suggestibility. It can best accomplish the second if it can create images vivid to the point of hallucination. But does art know any way of inducing a state of abnormal suggestibility so that the imaginations of writers, of painters, of sculptors may become real to us?

We succumb to suggestion only in a non-critical mood. The art-critic fails in absorption and may fail in appreciation simply because of the attitude he assumes before a work of art. But geniuses have their own way of disarming the criticisms of the normal reader or spectator. They write a fairy-tale or tell a story of No Man's Land. And who ever heard of criticizing a fairy-plot, the traditions of the world on the other side of the moon, or a romance laid in Ruritania? We appreciate the inspiration that puts wise sayings into the mouths of fools or babes or madmen! We never go to the trouble of proving that a fool or a madman is in the wrong. Why should we? Hence the uncritical way in which we ponder the wisdom of clowns; hence the force of the lesson of "The Ancient Mariner" coming from the lips of the "grey-beard loon"; hence the consummate effect of that incomparable scene in "King Lear," between fool, madman, and senile king.

But there are ways other than flight into realms of fantasy or the employment of defenceless folk, by means of which one may induce the non-critical mood, the mood of acceptance. The poet may actually create a state of drowsiness, one of semi-hypnosis. He may suggest sleep ; or fascinate attention ; or fatigue attention by means of a prolonged and monotonous stimulation.

Dancing charms us by its rhythmic recurrence of movement seen or movement felt. Prolonged, such stimulation completely hypnotizes the dancer. Thus we may explain the ecstasy of the dancing dervishes of the East ; the soothing influence of the rocking cradle ; the fascination of the vibrating swing. A nation may dance itself into religion or out of neurosis. Poetry and music make use of rhythmic sound to induce dreamy contentment and acquiescence. They utilize not only the soothing movement of cradle-songs and the obsession of singing verses, but also the beat of martial music and of epic measures. In song, the rippling accompaniment of an instrument, like a brook underground, may enforce the suggestion of the words. African music is said to be absolutely hypnotic in effect. It is somnolent, sombre, and voluptuous. And the reverberating drum of African forests—how potent its effect we may judge by the mesmeric spell it casts in O'Neill's " The Emperor Jones."

It is the African method that Vachel Lindsay employs in several of his favourite hypnotic devices such as the insistent rhythm, the booming rime, the syncopated measure, the sublimated jazz. His quaint instructions to the reader convey only in part the hypnotic suggestions inherent in Lindsay's own recitative of his verses such as the drooping eyelids, the undulating step and gesture, the accentuation of accent, the refrain flung at the audience and caught back from it. Submit to the spell and experience the luxury of utter relaxation; stand away from it and gaze in amazement at such grotesqueries.

What might be called the whirling-dervish-motif is characteristic of Lindsay's movements on the stage and suggested in his verse as in " How Samson bore away the Gates of Gaza " :—

> " Whirling his arms, like a top he sped.
> His long black hair flew round his head
> Like an outstretched net of silky cord,
> Like a wheel of the chariot of the Lord."

The writer may employ not only auditory rhythm, the rocking of verse, and the crooning of chant for inducing susceptibility to suggestion; he may also have recourse to direct suggestion of drowsiness or of sleep. Consider the twilight mood brought on by the first verse of Browning's "Love Among the Ruins": —

> "Where the quiet-coloured end of evening smiles,
> Miles and miles,
> On the solitary pastures where our sheep
> Half-asleep
> Tinkle homeward thro' the twilight."

Often the poet conveys his suggestion of quietude, of acquiescence, of drowsiness in the title of the poem or the book of verse. How many of them are elegies, reveries, voices of the night! Legitimate offspring of

> "Romance, who loves to nod and sing,
> With drowsy head and folded wing."

It is claimed by some that we pass into an hypnoidal state as we pass into either sleep or waking. The dawn mood of the early morning and the twilight mood are in themselves poetic; they possess each its own magic so marvellously caught in Michelangelo's representations of Night and Morning. Of the two the night mood is the more poetic because of the relaxation that comes at the end of things, because of spent emotions and the weary lag of thought. The morning mood hovers on the brink of the activities of the coming day; it may flame at a chance stimulation into alertness, into self-consciousness.

Sometimes the poet calls up through suggestion the actual organic toning of hypnosis. How accurately this is done in those wonderful opening lines of Keats' "Ode to a Nightingale": —

> "My heart aches, and a drowsy numbness pains
> My sense, as though of hemlock I had drunk,
> Or emptied some dull opiate to the drains
> One minute past and Lethe-wards had sunk."

Poetry and music and the dance lull reason by virtue of prolonged and monotonous stimulation. The visual arts resort to fascination of attention. We may thus explain the charm of the concentrated splendour of stained-glass illuminating, starlike, the dusk of dim cathedrals; thus explain the

appeal of the bright cross on the pinnacle of the temple. The greater the concentration, the more intense the obsession. A dewdrop shot with sun spells us more completely than does the large-orbed moon.

The centering of the light in a picture, the centering of a portrait in the eye are for purposes of fascination. How refrain, in this connection, from citing the fabled influence of the eyes of the Lady Lisa? Or, indeed, the glitter of the eye of the conventional hypnotist or that of the skilled coquette? Novelist and poet avail themselves of such suggestions of hypnotic power.

> "He holds him with his glittering eye
> The Wedding Guest stood still
> And listens like a three-years' child:
> The Mariner hath his will."

But the poet who would induce the æsthetic reverie in which the real world opens out into the infinite cannot cast his spell in a moment. The hypnotist repeats his command again and again. "You are tired, very tired; your eyelids are heavy; are heavy. You are drowsy; you are falling asleep—asleep—asleep——" So, too, the poet uses his refrains and the singer his chorus to enforce their suggestions. How effective the recurrence of the Wagnerian motif! How powerful an impression of tragedy is produced by the sombre refrain in Maeterlinck's prose, that monotonous reiteration of simple phrases which gradually become charged with infinite meaning.

Consider, for example, the employment of repetition among other hypnotic devices in "The Blind." Lost in their darkness of spirit—the mysterious deeps and chills of the hoary forest enforcing the inner gloom—the Blind huddle in terror, their guide dead in their midst. Far off, somewhere in the darkness, is the asylum that would offer them shelter; but they dare not move, dare not venture beyond the exploring hand lest they plunge into deeper desolation or into the hungry surf whose hoarse intoning girdles their little island. Immobile in a trance of fear, deaf and blind and imbecilic, they utter again and again the same simple words, the same moaning outcries of helpless terror: "We ought to find out where we are! We do not know where we are. My God!—

My God ! Tell us where we are ! " till little by little the bare phrases become surcharged with infinite tragedy, the outcry of humanity lost in eternal night.

There must be prolonged contemplation of the picture ; hour-long absorption in drama or novel. Fragments of poetry, bits of prose selected with however great skill, cannot create the illusions of the imagination. Nor can such illusions occur, except by accident, in the presence of other distractions. How become absorbed in the beauty of a picture when limping wearily through a crowded picture gallery ? How yield to the influences of music when following the baton of the conductor or the grimaces of the singer ? How submit to the spell of poetry if liable at any moment to be suspended on the teacher's interrogation point ?

In fiction, characterization is often made vivid by the continued repetition of a descriptive adjective or by suggestion, subtly repeated, of a characteristic gesture or attitude. It is but a step further to the " gag " of the comedy stage. Some trivial exclamation occurring again and again in varied situations finally concentrates within itself the whole force of the plot.

Often a number of hypnotic devices are employed in one production. Thus in " The Raven " we have a midnight scene, the drowsy lover pondering volumes of forgotten lore, the hypnotic tapping on the door, the monotone of the refrain. One further detail we must cite because of Poe's explicit consciousness of its effect. In his analysis of the construction of the poem he gives his reason for placing the scene indoors. He writes in " The Philosophy of Composition " :—

> " It has always appeared to me that a close *circumscription of space* is absolutely necessary to the effect of insulated incident —it has the force of a frame to a picture. It has an indisputable moral power in keeping concentrated the attention."

A curious anticipation of what psychologists might say with reference to the effect of restriction of movement upon concentration of attention and subsequent obsession !

It is this restriction of movement that increases the suggestibility of the mob. As the audience grows in density, the orator grows in power. The more closely packed the spectators in a theatre, the greater the effect of the drama.

Immobility suggests trance, hence the impressiveness of sculpture and the seeking of sculptural effects on the stage, particularly in ceremonial or death scenes. To produce similar effects Maeterlinck introduces characters asleep. Mélisande in the last act of his " Pélléas and Mélisande " stirs only to speak of the cold and the approaching winter before sinking back into the last long sleep.

Tennyson's " Lotus-Eaters " emphasizes absolute inaction following many suggestions of slow movement. Imagine the lazy drift of water, the hazy dreamy shadows, then read, " Full-faced above the valley *stood* the moon," not " floated " or " rose " but " stood the moon." A land where all things always seemed the same, where the mild-eyed melancholy Lotus-Eaters have voices " thin as voices from the grave."

" Most weary seemed the sea, weary the oar."

In Yeats' " Hour-Glass " where the sand is falling, falling throughout the play, the Angel appears and stands motionless in the doorway; so, too, the Wise Man stands silent for a long time, his eyes fixed on the distance.

The stage makes much use of devices that derive their effectiveness from soothing monotonous stimulation or from restriction of attention through fascination or from actual dissociation of consciousness through shock: a windmill turning in the background, or a spinning-wheel whirring in the foreground; drifting of incense-vapour or of falling leaves across the stage; rain, rain without ceasing; a throbbing drum; darkness pierced only by fire or candle-light; tolling of bells, clanking of chains, long silences; the fixated eye and motionless body; sudden crashes or startling noises as the flight of a great bird through the silence of a forest or from a turret; incantations that directly suggest sleep and trance.

Of such hypnotic devices Shakespeare was past-master. One recalls in " Macbeth " the witch-scene, the banquet-scene with the entranced king and crashing goblet, and the sleep-walking scene of the queen. Other illustrations might be chosen from " Hamlet," " The Tempest," and " A Winter's Tale."

Contemporary drama also gives us many illustrations. Ridgley Torrence in his one-act play " Granny Maumee " employs explicitly every sort of hypnotic device. The scene

is laid in the living-room of an old cabin with walls blackened by age. The colour-tone is red; red cotton curtains, red covers on chairs and table, red geraniums on a tripod-like flowerstand, a red fire in a great rough fireplace. A white counterpane on the bed gives a high light. Granny Maumee, black and thin, with her hair and face so seared with burns that her great age is masked, sits in a high-backed chair. She wears a red dress, red apron, and red cap. She is blind. She rocks back and forth, crooning a song. There is a "conjure" scene when Granny calls down a curse on the white man. She empties the red geraniums from the flower-basin, places the pot on its tripod in the centre of the room and in it puts a number of herbs and lights them. Then with a handful of burning herbs from the brasier she produces catalepsia in her two grand-daughters. One beats on a wooden bowl with a short stick, one rattles dry seeds in a gourd, while to the rhythmic drumming and rattling Granny Maumee intones a curse, the girls repeating each line in unison :—

"Fo' times, fo' times, fo' times fo',
Fly an call an' open de do'."

Charles Rann Kennedy has produced hypnotic effects in "The Terrible Meek." Perhaps the most striking device employed is that of darkness. In the beginning one can only hear voices, then in the greyness a dim form emerges, then faces are seen. When the Captain joins the followers of the man he has just ordered killed, a very brilliant light comes over the stage so that everything is visible.

Many sounds are employed, as the whistling or soughing of the wind. Note how the psychic censor would be put asleep and the emotions keyed-up by the scene as described by the author.

"Before the curtain rises, a bell from some distant place of worship tolls the hour. Nine brazen notes, far off, out of tune. Then a heavy peal of thunder, and the sharp, cracking sound of a bolt; yet, above all, one other sound, more piercing —a strange unearthly cry. There follows a mighty howling of wind, blended with a confused clamour of voices and the hurrying of many feet. The noises have almost all died away, when the curtain rises upon inky darkness." Then,

" A sudden hush. The silence deepens. There is a sense of moorlands and desolate places. Far off, a cow lows in her stall. Some lost sheep down in the valley bleats dismally. Silence again." [1]

It is evident from the examples that have been given that literature makes extensive use of various hypnotic devices. It does so with a twofold result. It induces a rest-state, one of relaxation, with a lowered personal threshold, a condition which is often its own excuse for being; and it uses this state of reverie to impress upon the unduly suggestible subject lovely visions and wise reflections. One's imaginations become hallucinatory. I have glanced up from my perusal of " The Fair God " to behold through a darkened window Montezuma's garden shimmering in the moonlight. In the background, silver palms and a crouching leopard-cat; in the foreground, a shell-strewn fountain-basin and a king standing in an attitude of meditation. Actual experiments have demonstrated the creation of illusions through prolonged contemplation of a picture. Only a painted canvas, and yet you see the leaves flickering in the wind and the waters cascading over flowery cliffs; you breathe the fragrance of the grasses and you feel the touch of the wind upon your brow. If you are very highly privileged the canvas, two by four, may open out for you and disclose long vistas of green woods and sunny skies.

As for the creative reverie which is self-induced or induced by the witcheries of nature, or love, one knows how its inner visions are embodied and projected into the outer world. Of this æsthetic illusion as experienced by creative workers we have many reports, as when Flaubert tells of the strong taste of arsenic in his mouth accompanying his description of the poisoning of Emma Bovary. And in his " Correspondence " he writes :—

> " Behold one of those rare days of my life that I have passed completely from one end to the other, in illusion. It is a delicious experience, that of being no longer one's self but of living in the whole creation of which one writes. To-day I have been at once man and woman, lover and mistress. On horseback in the forest on an autumn afternoon under the yellow leaves! I am the horses, the leaves, the wind, the words they speak, and the red sun which makes them close their eyes drowned in love."

It is the thought element in literature that gives it a range

[1] Quotations by permission of Harper & Brothers and of the author.

greater than that of any other art. For it embodies philosophies of life, hints at tremendous transvaluations, indulges in prophecy. And all this it may convey to the entranced reader by way of subtle suggestion with no need to seek the assistance of laboured argument.

*Rapport* enhances the potency of suggestions so given, for, as we have seen, it involves a narrowing of consciousness until it transfixes one influence to the exclusion of all others. With certain poets or dramatists or painters we are *en rapport* because of native interests or the autosuggestions of temperament. Some of us are very much at home in Poe's fantastic world or Dumas's romantic one. Others of us are " Browning-ripe," ready to yield at the first suggestion of the optimist. In other cases, we submit to the social prestige of the artist and the authoritative suggestions of the critic. With our yielding, with our realization of a novel personality, our own personality is enlarged. The poet or artist who becomes immediately popular is, likely enough, voicing truths to which the ear of the world is already attuned ; he who brings a new message may need to wait patiently the working of the spell.

Because the state of relaxation into which we may be plunged in the æsthetic trance is marked by a high degree of suggestibility which may be utilized by poet or philosopher in implanting in the mind a thought or a prophecy, art possesses healing power similar to that of the modern physician of the soul. In the treatment of his patient such a specialist often emphasizes two points ; first, the failure of the patient to respond normally to stimulation from without ; and, secondly as a consequence of this high threshold, the accumulation of energy which finds no natural or wholesome outlet. What the physician seeks is to induce relaxation of personal control and so gain access to this fund of energy which may then be used in various ways beneficial to the individual and to society.

On the whole, of course, the accumulation of reserve energy is profitable, since it makes possible the calling out in the normal individual of stored-up energy when a crisis makes extra demands upon him. But the inhibitions of the individual may be so great, the limitations of his activity so overwhelming, that whole systems of impulses become dissociated from the

functioning personality. There may arise extraordinary paralyses of activity; cramps in one's points of view; rigidity in one's outlook. Carried to the extreme we have the psychopathic individual who is a prey to worry, to fear, whose will is paralysed, whose life is a burden to himself and to others. Through the measures suggested above he may be liberated from bondage; the reserve energy that has become unusable may be tapped and the patient may come to rejoice in a new life, a transformation of personality that seems little short of the miraculous. This is an extreme case.

But we all halt only a little this side of the abnormal. Civilization, education, experience itself, tend to restrict our activities, atrophy our emotions, solidify our ideas. Flexibility and spontaneity of view vanish. We live on a level lower than we might, satisfied by achievements far within our capacity. Our threshold of stimulation is very high. New ideas break forth with difficulty. Sometimes a crisis liberates us in spite of ourselves. We fall in love in defiance of greying hair or we suffer repentance or remorse or are swept outside ourselves by a national calamity (war) or by an appeal to our cosmic sense (religion). But such excessive stimulation cannot be expected to occur often. Unless everyday life furnish stimulation in some measure, we are doomed to die down to the branch, to venture no more leaf-buds out into life.

It is a half-conscious recognition of this truth that causes revolt against all-engulfing system, too comprehensive efficiency, too sane judgment. Some free play for spontaneity is demanded, some simple way of lowering the threshold of stimulation. Here the advocates of intoxication (emotional or physical) enter a plea. Sanity itself may be guarded by an occasional relaxation of control, by a submergence of reason in a carnival of emotion, in a saturnalia of the senses that release flood-tides which may inundate far desert places.

A more wholesome view would delegate to art and religion the function of lowering the threshold of inhibition, of liberating subtle suggestions. Doubtless there are great dangers inherent in their powerful sway over the impulses of men; and Tolstoi's strictures as to much that we accept in the name of art and religion must be conceded, even though we take issue with him as to the immorality of all intoxication, whether it proceed

from the soft lights and music of the cathedral service or the sparkle of amber in the wine-glass. We must learn in some way to reconcile the dominance of reason with the submergence of self, with its absorption in an oversoul, for thus it approaches the secret reservoir of life.

## CHAPTER XXIX

## INTROVERTED ART

INTROVERTED art is an attempt to turn inside out the oddly woven souls of us, to see what the garment of thought and emotion is like on the inside, with its patches, its rough seams, its frayed and thin spots. The new art has been variously named but is perhaps most widely known as *Expressionism* since it represents an attempt to express through art the inner self of the artist, to give a subjective presentation that may, writes Pfister, be accompanied "by total or almost total distortion of nature to the point of unrecognizability or of suppression of all external reality."[1] My name for the new departure is introverted art since it mirrors on the creative level a well-known type of inward-glancing and egocentric personality.

Introspectionists who follow with interest the fascinating, thoroughly illogical and tortuous workings of the mind, take great delight in the constructions of the new art; they realize that the enchanting ways of the mind are far from being thoroughly exploited. The successful exploiter must, indeed, be considerable of a psychologist with a strong interest in seeing things from the inside. By a freakish turn of epochal logic, however, it happens that the artist shifted from an objective representation of reality to an attempt to reproduce the world as it appears to the consciousness of the individual, just at a time when the students of human behaviour were to some extent rejecting introspection as a scientific method and demanding a more objective procedure. Possibly, as some scientists insist, an intimate description of psychic experiences is artistic, not scientific in intention. Yet so long as the introspectionist seeks to find some order in chaos, looks for the common impulse that manifests itself in highly indivi-

[1] *Expressionism in Art.*

dualized projections, just so long introspection bids fair to contribute to science if in no other way than by putting pointed questions to it.

It may be worth while to pass in rapid review a few of the motives of the new art that intrude on the preoccupations of the psychologist. It is with the literary forms of it that we are most concerned and particularly with drama which has, perhaps, penetrated farthest into psychic regions, although such short stories as those of Sherwood Anderson's or novels like " Ulysses " cause one to hesitate a little in making such an assertion.

We have had occasion in an earlier chapter to note the use in modern novel and drama of audible thought, or the inner speech, as a device for externalizing the commentary of the self upon external events. It is quite within the province of the novelist and dramatist not only to employ the inner speech as a device for such dynamic self-projection but also to copy the abrupt, disjointed style of the inner soliloquy. In fact, they make frequent use of a distorted order of words, ungrammatical constructions, tense verbal explosions in order to remain true to the mental dishabille of the inner speech.

The introduction of inner speech upon the stage presents the actor with a new problem in interpretation since by some device he must make manifest to the audience when speech is oral, when it is a presentation of thought. The actor does not, apparently, find this problem insoluble. The facial expression characteristic of thought, the bodily immobility that accompanies meditation can be imitated successfully. The retreat of the personality into itself, or its expansion toward outer reality, are mirrored in attitude and gesture.

The modern use of the mask to suggest the assumption by the actor of different points of view, different phases of personality, is part of the same attempt to project the subjective self, to dramatize psychic tensions. For the multiple self, multiple faces.

When Rice in his drama " On Trial " played at will with dramatic sequences, he was said to be adapting to the legitimate stage a device common enough to the movies which are able to flash on the screen memories, anticipations, and dreams at will. But both spoken drama and movies really borrowed the

device from the cunning mind of man whose thoughts have never been in bondage to the calendar although the latter has often forced the conscientious playwright or novelist into a strait-jacket. The movies in assuming the freedom of a flight of thought flit at will from to-morrow to yesterday, reversing the time order if the climax demands it ; chronology yields to dramatic sequence. This idea if pursued further suggests new possibilities in art. I am referring to a psychical reconstruction of events in harmony with some inner logic and not merely to fantastic movie-trickery.

The rate at which thoughts or experiences develop determines the speed with which time passes, just as the speed with which the motion-picture man turns the crank determines it. Time is telescoped in proportion to the amount of life we pack into the moment. It lags woefully when nothing is happening. A vacation week melts away by magic ; an hour's waiting for a late train is an eternity. In retrospect all this is reversed. Empty time affords no attachment for thought ; filled time tempts us to loiter. Further artistic utilization of these time-fantasies will be found, for they make possible a new sort of portrayal of emotional crises, a lengthening out or a telescoping of life so that a thousand years seem as a day and a day as a thousand years. It is, indeed, in the relativity of time as a psychological matter that one must look for an explanation of apparent inconsistencies of the emotional life, those second ardent romances too soon conceived, those falsely seeming swift recoveries from tragedy ; the year of sorrow is a real eternity.

The new art admits to a rôle in drama or fiction those fantasms of the mind that we have studied under the name of images and hallucinations ; and it admits them under the banners of a far-reaching relativity, a freedom not only from the logic of time but also from the logic of a conventionalized geometry.

In the chapter on the space characteristics of images and in that on the cartooning consciousness we had had much to say about the effect of emotion and fluctuating interest in magnifying and minifying objects of thought. Every one has experienced that curious illusion of memory whereby the big mansion of childhood days seems on a visit to the home-

town years afterwards to have dwindled to unbelievingly small proportions. Distortion of space characteristics and emotional disproportion are common features in our thoughts and yet often impress us unfavourably when imitated in the new art of painting by expressionistic artists. Up to the present, modern drama has taken few liberties with objective space-relations although the silent drama and poetry have played fitfully with them.

" Monodrama " or the setting of a play within the mind of one person shows the degree to which subjectivity may be carried. Writing in " Playwrights of the New American Theatre "[1] of O'Neill's " The Emperor Jones," Dickinson says: " Creative, too, is the reappearance in the mind of the fleeing man of the phantoms of the past history of his race, phantoms which are so much more real than reality that his foolish bullets are wasted on them. The little Formless Fears, the Prison Guard, the Planters, the Auctioneer, the Slaves, the Congo Witch Doctor, the Crocodile God are effective as phantoms. But they are more than phantoms; they are reality to Jones, they are Jones."

The modern artist, just as the psychoanalytical psychologist, has found much profit in the study of the dream. Introverted art borrows generously from dream-technique. Apparent irrelevancies, distortions of outer reality, overweighting of certain features as a method of subjective emphasis—all are mirrored in modern art-products. Strindberg's " Dream Play " is a masterful reproduction of the emotionally logical, though intellectually inconsequential, mind of the Dreamer. " Beggar on Horseback "—an American Comedy—resorts to multiplication of butlers, ushers, reporters, as though reflected in a crazy house of many mirrors quite in the dream fashion. Even the curious symbols, the emotional complexes and hidden desires of the sleeping or waking dreamer, are dramatized by the modern psychoanalysing playwright and painter. So far as I am aware, except on the silver screen, they have not yet introduced those quaint fantasies of self-projection which we have had occasion to review in another connection.

[1] T. H. Dickinson: *Playwrights of the New American Theatre.* Copyright, 1925, by The MacMillan Company. Reprinted by permission.

The use of the new material is a challenge to the old stage technique and conventions. It may be that a transparent or cloudy curtain is used to suggest that the action takes place on the plane of the mind, or mirroring walls are utilized. It is no easy matter suggesting that an alien character is somehow surreptitiously entering another's private world of thought or fantasy. Indeed, the sliding of subjective worlds one over the other demands an almost miraculous technique. Fortunately the new drama has at its disposal a new art, that of stage lighting, which can make and dissolve settings by magic.

A recent sketch of Christopher Morley's[1] "Really, My Dear . . ." illustrates how the psychic may be visualized. A white line is used half-way up stage to indicate where the material world leaves off and the mind of the poet begins. Beyond the white line the stage is bare and fades off into blue infinity. "A blue backdrop and some delicacy of lighting give the illusion that the whole back wall has been removed." Abysmal depths and "not even a railing!" Later on, when visitors arrive and the poet's wife reads to them from the poet's new book, the instructions run: "Without wishing to drive the idea in too hard, it is suggested that what follows is the drama that transpires inside their minds while A is reading aloud to them."

Not only may the Thinker's Thoughts become embodied in visible characters, they may even take it upon themselves to declare their independence and play a rôle on their own hook as in Pirandello's "Six Characters in Search of an Author." Here psychology becomes metaphysics and one sees reality in the making. The same philosophical preoccupation underlies Pirandello's use of the insanity motive.

In the older drama the madman was employed largely for purposes of plot-complication or for more or less superficial contrast. Nowadays art is endeavouring to glimpse the landscapes of other psychic planes, to open windows into the consciousness of so-called abnormal individuals. It would see through their eyes, perhaps encourage a transvaluation of reality because of realization of alien types of experience. An imaginative penetration into the mind of the psychotic individual is a stroke of genius. But even the genius needs

[1] *Forum*, May 1928.

to take counsel with the psychiatrist. Valid imaginative reconstruction must develop from scientific insight.

That the imaginative writer is really taking cues from the psychologist is shown in his attempts to reconstruct the mind of the little child not only from his own halting memories but also from a comprehension of the ways in which the child-mind differs from that of the adult. Someone has said that the child was the greatest discovery of the nineteenth century, but has the discovery been more than adumbrated? Very little do we know yet of the time and space and causal world in which the infant lives; nor can we assume the point of view that gives him so quaintly different a psychic perspective.

Much the same thing might be repeated concerning the primitive mind or, thinks Spengler, concerning the soul of any culture. Those scientists who are seeking clues for interpretation may eventually present us with new worlds of reality. Now that the globe is shrinking daily and our thirst for the strange and alien cannot be gratified to the extent it was formerly by travel in lands once far off and mysterious, now near and familiar, we undertake psychic exploration avidly. The creative impulse meets the psychological more than half-way.

There are two contrasting motives in the new art which at first sight seem opposed; namely, the realistic, almost photographic motive, and the subjective or introverted motive. Neither can be pushed too far with safety. Realistic record is the province of the clinic; sheer subjectivity sacrifices communicability. No material should be taboo to art; but all should be thoroughly dissolved in that alembic whose formula is the secret of the imaginative genius.

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